Clinical Remarks
ON
ABSCESSES IN THE UPPER PART OF THE ABDOMEN.

Delivered at St. Thomas's Hospital,

By JOHN S. BRISTOWE, M.D., F.R.S.,
SENIOR PHYSICIAN TO THE HOSPITAL.

GENTLEMEN,—Cases of abscess arising in the upper part of the abdominal cavity are always extremely interesting, for their diagnosis is generally difficult, and they are often not only sources of anxiety to the medical man, but attended, as regards the patient, with much distress and danger. The cases which I am about to recount and comment upon are remarkable in these respects. The first was very instructive, at any rate to myself. It was that of a young woman who, a few years ago, was transferred from the Westminster Hospital to my care here, at the time when that institution had to be closed for the purposes of cleaning and alteration. She came to me with the history that she had been suffering from ulcer of the stomach, that perforation of this viscus into the peritoneal cavity had taken place, that she had consequently had sudden and intense peritonitis, of which she had nearly died, but that her acute symptoms had subsided, and that there had been for two or three months slow but on the whole progressive amendment. On admission her symptoms suggested to me that she was suffering from general tuberculosis, with special implication of the peritoneum. It is true that cases of recovery after rupture of the stomach into the peritoneal cavity are recorded, and especially I recollect that one such apparently undoubted case was published many years ago by the late Dr. G. H. Barlow, of Guy's. But knowing that recovery after such an accident is one of the rarest incidents in medicine, and never to be admitted in any case without the strongest evidence in support of it, I was naturally predisposed to disbelieve in the diagnosis made at the Westminster Hospital, and am afraid that I did not hesitate to express myself irreverently with respect to the diagnosis of the distinguished physician under whose care she had been. I know, indeed, that I repeatedly pointed out that the symptoms she presented on admission into St. Thomas's were exactly such as one observes in tubercular peritonitis, and that, taking all things into consideration, it was much more probable that the acute attack she had had some months before, and which had been attributed to perforation, was an accident, so to speak, of her abdominal tuberculosis, and had been misinterpreted. Her progress while under my care seemed to accord with my diagnosis; and the fact that she had a slight cough, attended with some indications of mischief at the apices of the lungs, and that shortly before her death she expectorated some very fetid fluid, amply, as I thought, confirmed it. Now, at the post-mortem examination there really were found tubercles in the peritoneum and tubercles in the lungs; and so far, of course, I was right. But I could not help admitting that the tubercular disease was not sufficiently advanced to have caused her death, or even to have been the chief factor in the causation of her symptoms. And, indeed, we found something more. We found that she had had an ulcer of the stomach, and that this had perforated the organ; and we found further that a circumscribed abscess between the stomach on the one hand, and the under-surface of the liver and diaphragm on the other, had resulted from the perforation, and that the fetid matter expectorated from the lungs shortly before death had been derived from the abscess, which had opened through the diaphragm into the base of the left lung.

It will be admitted, I think, that my diagnosis was not quite unjustified by the event, and that even the expectoration of stinking fluid was, on the whole, calculated to confirm me in my opinion of the case. But I am bound to confess that I failed to recognise or admit the main facts of the case, and to acknowledge that the physician under whose care the patient was originally was essentially correct in his views, and that he deserves high credit for both his accurate diagnosis and his skilful treatment of a very obscure and interesting case. I take off my hat to Dr. Sturges, and promise never again to treat his medical opinion with disrespect.

CASE 1. *Perforating ulcer of stomach; rupture into peritoneal cavity; formation of circumscribed abscess between liver and stomach, subsequently opening into the lung; miliary tubercles in lungs and peritoneum; death; autopsy.*—Ellen R. H——, a girl nineteen years of age, was brought from the Westminster Hospital, and placed under my care in St. Thomas's on June 18th, 1877. Her history was that she had been suffering for some time from ulcer of the stomach, with vomiting of blood, and that she had been three or four times in the Westminster Hospital for that malady; that last March she was sent thence to the Convalescent Home at Walton; that while there she was attacked suddenly with severe epigastric pain and faintness, and was consequently brought back to Westminster Hospital; that on readmission she had extreme general abdominal pain and tenderness, with tympanites, vomiting, collapse, and other characteristic signs of peritonitis of a very severe form. It was assumed that perforation of the stomach had occurred at the seat of ulceration; but under judicious and careful treatment she emerged from her condition of collapse, and the more acute of her abdominal symptoms subsided. Since that time her condition has varied a great deal, and she has remained very ill and weak, but on the whole has improved. She has been sick at times, and has had a slight cough. On admission into St. Thomas's she was anæmic, emaciated, and very weak. Her abdomen was tumid, tense, tympanitic, and tender on pressure; and she suffered from pain and uneasiness in it. Her tongue was coated; she was thirsty, frequently sick, and had little appetite. There was no marked dulness at the apices of the lungs, but there was a little variable subcrepitation, and a little wheezing over the rest of the lungs. Pulse 100; respiration 24; temperature 100·2°. There was no further evidence of disease. She was treated with ice to suck, a mixture containing bismuth, and nutrient enemata. She remained very weak, perspiring profusely at times, and presenting a temperature which usually varied between 101° and 103·5° down to July 9th or 10th. But, notwithstanding, she seemed to improve; her sickness diminished, she took food by the mouth, felt stronger, was able to sit up in bed, and looked bright and cheerful. At this time her tongue was clean; her chest was resonant, but there was a little subcrepitation and wheezing at both apices, most at the right, and at the left base; she had a little dry cough; and the abdomen was only slightly tumid and tender, mainly below. Soon after this, however, a change for the worse occurred, and on the 12th or 13th her cough became very troublesome, and attended with copious expectoration of a very offensive, turbid, brownish fluid. Her tongue remained clean, but she lost her appetite again, her pulse rose in frequency, she became excessively weak, and, continuing to the last to spit up large quantities of the fetid fluid above described, died exhausted on the morning of the 16th.—Autopsy: The lungs were studded with miliary tubercles, and the peritoneum presented abundant old adhesions with scattered tubercles of the same kind. Between the stomach below, and the under surface of the left lobe of the liver and the diaphragm to the left of this above, was a flat abscess-cavity occupying an area about equal to that of the hand. It was bounded elsewhere by old adhesions. Its parietes were dirty-looking and flocculent, and it contained a small portion of fluid resembling that which had been coughed up during life. This cavity communicated on the one hand with a small perforated ulcer situated at the posterior part of the stomach, near the pylorus, and on the other by a fistulous opening, through the diaphragm and adherent pleura, with the base of the left lung. The gastric ulcer was small and quiescent; the orifice in the base of the lung was irregular and flocculent-walled, and was the channel by which the contents of the abscess had been recently evacuated. All other organs were healthy.

The second case also was one of much interest, and one in regard to the exact nature of which I was long in doubt. The patient was a young married woman, who for eighteen months before I saw her had been suffering from pain in the splenic region, and who had had rigors. On admission into the hospital she presented a tumour of considerable size in the situation of the spleen, which differed from the spleen apparently only in the facts that it was distinctly adherent to the abdominal parietes, and consequently moved only with them, and that its anterior edge was obtuse, and pre-

COPY AVAILABLE

sented no notch. The patient was very weak and ill, and during the ensuing two months or more complained of a good deal of pain and throbbing in the region of the tumour, which remained stationary; she presented a very fluctuating temperature of hectic type, which often rose above 105°, and on one occasion reached 106·8°, and, on the other hand, frequently descended to the normal, and even below that; she had occasional rigors, and suffered from nausea and sickness, from alternations of diarrhœa and constipation, and from occasional pains in her limbs. Moreover, the urine at times presented traces of albumen. In the early period of my treatment of the patient I had some inclination to think that her symptoms were due to malarial poisoning, although the apparent incorporation of the tumour with the abdominal walls was adverse to the view that the tumour was simply an "ague-cake." Before long, however, I began to suspect the presence of multiple embolism, with special implication of the spleen: an interpretation of the case which seemed in accordance with the peculiarities of the temperature, and most of the other phenomena above enumerated, but which the absence of obvious heart disease contra-indicated. It must be borne in mind, however, that vegetations are not unfrequently present on the auricular aspect of the mitral valve, and on the adjacent walls of the auricle, which cause no interference with the due action of the valve, and are consequently unattended with murmur. Later, it was concluded that suppuration was going on; but the continued hardness of the lump, the total absence of fluctuation or even of any yieldingness, and its invariableness as regards size and shape, threw some doubt on this opinion. The view to which there was an inclination at this time was still that the patient was suffering from multiple embolism; but that some of the infarcts, which were presumably present in the spleen, had broken down, and were suppurating. A week or two before death some important changes took place in her condition. Diarrhœa came on, but the character of the stools unfortunately was not noted; she vomited a yellowish fluid of the consistence of gruel, with a manifest fæcal smell; and about the same time the tumour almost wholly disappeared. Finally she brought up from the stomach solid lumps of fæces. It had now become perfectly clear that there had been an abscess in the situation of the supposed tumour, that it had opened both into the colon and into the stomach, and that a pretty free communication had become established between these viscera. The post-mortem examination showed little more than the correctness of this last inference. I assume, however, from the appearances found that the disease had begun in the colon, and that the inflammatory lump simulating the spleen was in some way or other (probably by the formation of a circumscribed peritoneal abscess) secondary to the intestinal disease.

CASE 2. *Abscess in the splenic region, between stomach and transverse colon; communication between these viscera; vomiting of solid fæces; death; autopsy.*—E. C——, a married woman, aged twenty-seven, was admitted under my care on July 21st, 1880. She had had no illness of any importance, and there was no suspicion of syphilitic taint. She had had six healthy confinements. She first complained of illness eighteen months previously, just after the birth of her fifth child. At that time she began to suffer from pain in the left side, between the ribs and the crest of the ileum. There was tenderness, but, so far as she knew, no tumour. About that period, too, she had attacks of shivering. The pain and tenderness have never left her, and she has gradually lost flesh. Two weeks ago (July 8th) her last child was born, since which time the pain in her side has been much worse, and a tumour has been discovered in the splenic region. The pain has been of a throbbing and shooting character. She had some rigors before her confinement, but none since, until the day of admission. She had become very weak, had lost appetite, and vomited frequently. There had been no cough, no disturbance of the bowels, and no unhealthy symptoms referable to the reproductive organs. The patient on admission into the ward looked careworn and ill; tongue furred. In the splenic region was a hard tumour which did not move with respiration, and which seemed to be adherent to the parietes. It extended, in the mid-axillary line, four inches and a half below the ribs, and thence towards the median line of the abdomen, which, however, it did not reach. The general surface was rounded, its edge was obtuse, and presented no notch. It was dull on percussion, and dulness, continuous with it, extended to three inches and a half above the ribs in the mid-axillary line. The liver appeared to descend a little below the ribs. There was a little fine crepitation at the base of the left lung on deep inspiration. All the other viscera were apparently healthy. Urine 1015, no albumen. For the next four weeks her symptoms presented slight fluctuations, and on the whole improved. During this time the swelling underwent little or no change in size, but remained painful and tender, and at times she felt much throbbing in it. It continued hard, and with no sense of fluctuation. Her appetite was bad, and she was occasionally sick; her bowels were confined; her temperature was very irregular, varying from 99° to 103·4; and from time to time she had a rigor. There was a good deal of improvement, however, from the 11th to the 17th, during which time the temperature never rose above 99°, and was generally either normal or subnormal; the pain and tenderness also diminished. On the 18th her temperature rose from 101·6° in the morning to 103° in the afternoon, and she was very ill. During the next ten days she remained in the same condition. Her temperature presented the hectic character, rising on several occasions above 105°, and once to 106·8°, and often falling to the normal, or even to 97°. She had frequent rigors, and occasional pains in her limbs. Her appetite failed entirely, but she did not suffer from sickness. On the 24th she passed a small clot of blood with her motions, but she had no diarrhœa. The urine, which was of rather high specific gravity, contained a trace of albumen. She became exceedingly weak, prostrate, and very anæmic. It was observed that the lump remained about the same size, without bulging or fluctuation, and that its anterior and lower margin was distinct. After August 28th the temperature only once reached 105°. It fluctuated a good deal, however, and, excepting that she got manifestly weaker, she seemed on the whole to improve. On Sept. 4th and 5th she suffered from diarrhœa; but the character of the stools is not recorded. On the 4th, after feeling nausea for some time, she vomited about a pint and a half of yellowish-coloured fluid, of the consistence of gruel, with an offensive fæcal smell. On the 9th she vomited half a pint of greenish fluid. The bowels continued to be moved freely. About this time the pain and tenderness in the region of the tumour diminished greatly. And on the 24th the following note was taken: "Patient weak; appetite very bad; no vomiting; no tenderness or pain in the region of the tumour; and all that can now be felt of the tumour is a cord-like hardness about the size of the finger, extending vertically downwards from the cartilages of the ribs." She continued from this time henceforth to be free from pain or material tenderness in the left side; the region of the tumour became resonant, and no indication of its presence, beyond the band just referred to, remained. Her temperature moreover became normal, and latterly even subnormal, and there was no recurrence of rigors. But pains, apparently rheumatic, affected the joints of her lower extremities, mainly those of the right side; her appetite remained very bad; and she steadily lost flesh and strength. She vomited occasionally, and a few days, eight or ten perhaps, before her death she brought up for the first time solid lumps of unmistakable ordure. This was repeated on several occasions, and was regarded as a clear proof that some direct communication had become established between the stomach and the colon. She died on Oct. 12th. It may be added to the above account that there was never any sign of heart disease, or of change in the constitution of the blood, and, as regards treatment, that in the early part of her residence in the hospital a few leeches were applied over the tumour on several occasions, and also poultices; that when the temperature was excessive quinine and salicylic acid were both tried in large doses without material effect; and that generally she was treated with tonics and opiates. Post-mortem examination: On opening the abdomen a large, irregular, shreddy-walled cavity was found in the left hypochondriac region, between the left extremity of the transverse colon and the cardiac end of the stomach, bounded above in part by the left lobe of the liver and in part by the abdominal parietes in the left hypochondrium. It contained shreds of tissue and blood, but no pus. It communicated freely both with the colon and with the stomach. In the transverse colon, near its splenic flexure, was an area of deep ulceration, surrounding the gut, and measuring about two inches and a half in length. Its edges were thick and spongy, but there was no evidence of new growth. The orifice of communication with the cavity was towards its posterior part. The openings into the stomach were several ragged holes clus-

BEST COPY AVAIL

tered together, and had evidently taken place from without. The mucous membrane around them was quite healthy. The liver and spleen were healthy, and no other viscera presented any evidence of disease.

In connexion with the last case I may recall the facts of another (Case 3) that was under my care in the hospital some years ago, but of which unfortunately the notes have been mislaid or lost. The patient was a tall young man, of about nineteen, with rickety curvature of the tibiæ and other bones. He had, however, generally had good health, until, I think, a few months before I saw him, when he began to suffer from pain and tenderness below the left ribs. He went for a time into one of the large metropolitan hospitals, and there the tumour, which was discovered in the splenic region, was taken for the spleen. On his discharge at the end of a month or two no material change had taken place in his condition, and his disease was still assumed to be splenic enlargement. On admission into St. Thomas's a tumour was recognised, which from its situation and form might certainly have been taken for the spleen. But it was, as in the last case, unaffected by the movements of the diaphragm, and evidently adherent to the abdominal walls. So far the case was an almost exact counterpart of the one just narrated. But there were also manifest bulging of the lower ribs on the left side and of the adjacent part of the abdomen, and a great sense of resistance: phenomena which are always strongly suggestive either of an abscess or of a new growth, and of its incorporation with superficial parts. Accordingly I came to the conclusion that the patient was suffering from a new growth or abscess, arising in the spleen or its neighbourhood, but involving the abdominal walls. I forget whether there were any additional facts in his history, or any peculiarities of temperature or symptoms when he first came under my care, to lead me to prefer one of these alternative views to the other. I also forget whether I was tempted to make an exploratory puncture for diagnostic purposes. But I know that after a time I had an incision made into the swelling, that a large quantity of thick pus was evacuated, and that at the end of a few weeks the patient left the hospital well.

I do not know that one learns any very important special lessons from the above cases. But there are two or three points suggested by them to which I may call attention in a few words. In the first place, in the two cases that ended fatally, the cause of the circumscribed peritoneal suppuration was found to be perforation of one of the hollow viscera. It may be assumed, from this fact, as well as on other grounds, that abscesses in the upper part of the abdomen, not due to abscess of the liver, are largely dependent on this cause. In the second place, all the cases suggest the importance of evacuating the contents of abscesses in this situation as early as possible. Abscesses here, if left wholly to nature, are liable to burrow in various directions, to discharge themselves into and through various organs, and to lead in the course of their extension to irreparable mischief. By a free external opening made at an early period such disastrous consequences would obviously be to a large extent averted. And, in the third place, it seems clear that the recognition of abscesses in the upper part of the abdomen is often extremely difficult, if not impossible, and that to diagnose them correctly demands the most careful and continued observation, and to treat them effectively calls for both skill and courage. I make these latter remarks without intending to imply that in dealing with my own cases I showed conspicuously any of the qualities here specified.

I venture to add, in conclusion, a brief account of a post-mortem examination which I made many years ago on a girl whose case in many respects obviously resembled that with which I commenced my lecture. Unfortunately no clinical account has been preserved. But the post-mortem record shows clearly that she had an ulcer of the stomach, which had perforated that viscus; that as a result of this perforation circumscribed peritonitis had ensued, with the formation of fetid pus in the neighbourhood of the spleen; and that the circumscribed abscess had both penetrated into the substance of the spleen and perforated the diaphragm. It is interesting, however, to note that the fetid abscess was separated from the perforation, which had doubtless caused it, by a tract of simple inflammatory adhesion; that although the abscess had perforated the diaphragm there was reason to think that inflammatory changes which were present in the chest had not been caused by this perforation; and that gangrenous cavities whence fetid pus might well have been expectorated were present in the bases of both lungs. The case is further interesting because the abscess connected with the spleen was mainly in front of it, and must, if it had been recognised during life, have presented the local features exhibited in my last two cases.

CASE 3.—C. H——, a girl, aged eighteen, was admitted into St. Thomas's Hospital on March 27th, 1854, and died there on April 6th. At the autopsy the pericardium and heart were found to be healthy. The lower lobe of the left lung was adherent to the diaphragm and sides of the chest by a layer of recent lymph; it was more solid than natural, congested, and soft, and presented numerous patches, from the size of a filbert downwards, in which the tissue was solid or broken down into a stinking gangrenous pulp. The upper lobe of the left lung was healthy. The upper and middle lobes of the right lung were healthy, but the lower lobe was in the same condition as the left lower lobe, though less extensively affected, and recent lymph was deposited on its surface. Abdomen: All the peritoneal membrane below the stomach and great omentum was healthy; but the left lobe of the liver was attached to the diaphragm by recent adhesions, and the under surface of the anterior half of the right lobe, and the whole of the under surface of the left lobe were similarly united to the anterior surface of the stomach and to the spleen. On separating the liver from the stomach, a circular opening, about half an inch in diameter, was found in the anterior wall of the stomach close to its lesser curvature and midway between the œsophageal orifice and the pylorus. On separating the spleen from the parts surrounding it a circumscribed cavity was laid open, the walls of which were formed by the anterior half of the spleen, the diaphragm, and the cardiac end of the stomach. This cavity contained a considerable quantity of thick greenish fetid pus and was lined by soft discoloured lymph. It was further found that a diverticulum of the abscess extended into the substance of the spleen, and that a little above this point the diaphragm presented several perforations due to ulceration. Direct communication between this abscess and the pleural cavity appeared to have been prevented by adhesions between the diaphragm and ribs; and further no direct communication could be traced between it and the ulcerous perforation of the stomach. The mucous membrane of the stomach was generally healthy, but at the seat of perforation it was destroyed to a considerable extent. The ulcer was one of the ordinary character, and partly cicatrised. All the other organs were healthy.

ON A

METHOD OF DEMONSTRATING THE GREAT INTEROSSEOUS LIGAMENT BETWEEN THE ASTRAGALUS AND OS CALCIS.

By JOHN STRUTHERS, M.D.,
PROFESTOR OF ANATOMY IN THE UNIVERSITY OF ABERDEEN.

THE fore part of this ligament is easily exposed on its outer aspect in the ordinary dissection of the dorsum of the foot, and useful views of the concealed part of the ligament may be obtained by transverse vertical sections made with the saw through the astragalus and os calcis; but even these two methods combined fail to give a satisfactory view of the ligament, or to enable us to see clearly the functions of its several parts. The following is the method I employ:—

Take an ordinary ligamentous preparation of the tarsus. With the saw divide the astragalus into three parts, so that the narrow middle portion shall carry the entire upper attachment of the ligament. The middle portion should be about one-third of an inch in breadth, but a little broader (5 lines) in front. The inner cut should, in front, be close to the inner edge of the cartilage of the head, leaving a shaving of the neck with the middle piece, and, behind, be at the hinder end of the internal malleolar facet. The outer cut should extend from the fore end of the external malleolar facet to close to the inner edge of the groove for the flexor pollicis tendon. The sections should be vertical. Only a narrow margin of bone remains on each side of the ligament, so that the attachments and functions of the ligament may be clearly seen. If the section prove to be too thick below, it may afterwards be sloped near the ligament. The demonstrator, however, will soon learn how to make these sections accu-

COPY AVAILABLE

rately and easily in the dissecting-room. The lateral portions of the astragalus should be left hanging to the os calcis by portions of the lateral ligaments of the ankle, or attached by catgut, and thus be readily replaced.

We now see the whole extent of the interosseous ligament from before backwards, and its length, direction, and thickness at different parts, and can demonstrate the functions which it performs in relation to the various movements of the astragalus or os calcis. The method is useful also from the way in which it presents for study the joints on either side of the interosseous ligament, and enables the parts to be again replaced. In making a dried preparation of the ligament by the above method, the lateral portions of the astragalus may be attached by a catgut cord, piercing them, and dipping into the os calcis below the ligament, so that when the cord is pulled the three pieces go into position.

I may mention also a method of exposing the interior of the ankle-joint, which may be combined in the same preparation with the above method of exposing the interosseous ligament. Having dissected in the usual manner the ligaments of the ankle and tarsus, divide the portion of tibia by an antero-posterior vertical median cut with the saw. If it is for the ankle-joint alone, the preparation may include several inches of the tibia; if it is for a preparation to show also the interosseous ligament by the above method, half an inch of the tibia will suffice and be more convenient. The two side pieces of the tibia now fall asunder, displaying the whole interior of the ankle-joint and giving an inside view of the ligaments and their points of attachment. If the astragalus be then divided by the above method, the lateral ligaments of the ankle serve for the lateral pieces of the astragalus to hang on by. The three pieces of the astragalus may be replaced, and then the two sides of the leg, and thus the whole built up again. Such a preparation, with the facility which it affords for opening out the joints and again replacing the parts, will be found very useful in the anatomical school.

I have shown these methods for many years and to various teachers of anatomy, but, so far as I am aware, they have not yet found their way into any of the text-books.

Aberdeen.

A CONTRIBUTION TO THE SUBJECT OF CEREBRAL LOCALISATION.

BY SEYMOUR J. SHARKEY, M.B.,
ASSISTANT PHYSICIAN AND JOINT LECTURER ON PATHOLOGY AT ST. THOMAS'S HOSPITAL.

IN the *Revue de Médecine* for May, Charcot and Pitres published the first part of an essay, entitled "Critical and Clinical Study of the Doctrine of the Localisation of the Motor Centres in the Cortex of the Cerebral Hemispheres of Man." They state, to begin with, that they purposely set aside all the results of experimentation on animals, and that they seek in clinical and post-mortem records to find an answer to the question, "Can lesions of the cerebral convolutions in man produce disorders of movement; and, if so, does any constant relation exist between the seat of the cortical lesions and the distribution of the paralytic and convulsive phenomena which are consequent on them?" For the purpose of answering this question they have collected some 200 cases, which have been published during the last four years. These they divide into four categories—1. Destructive lesions of the cortex outside the motor zone, and unaccompanied by disorders of movement. 2. Destructive lesions of the motor zone, accompanied by paralytic phenomena. 3. Observations bearing upon the relation between partial epilepsy and irritative lesions of the cerebral cortex. 4. Observations which contradict, or which have been given out as contradicting, the theory of cerebral localisation.

After dealing with Category 1 in the *Revue de Médecine* for May, they have published in the June number cases belonging to the second—viz., lesions of the motor zone; and in subsequent numbers of that journal they propose considering the remaining two divisions of the subject. During the last five years or so I have watched, as closely as I could without having charge of in-patients, the cases of nerve disease which have been admitted into St. Thomas's Hospital, and as demonstrator of morbid anatomy, performing the post-mortem examinations on three days in the week, I have tried to collect evidence which might either disprove or support the theory of cerebral localisation. This appears to be a fitting occasion for publishing the results of my observations, and I have to thank several of my colleagues for their kindness in allowing me to make use of cases which were under their care. My contribution to this question consists of no more than six cases, for I have selected those only which presented lesions affecting the supposed motor zone—viz., the two central ascending convolutions. Many other instances of cortical lesions have come under my notice, but they were either confined to other regions of the cortex, or they were complicated by some deep-seated disease, and were thus inappropriate for the question under consideration. But though the cases are few in number, it is curious how completely they happen to illustrate the lesions of this portion of the cortex. Thus, (1) in a case of paralysis of one leg; (2) paralysis of one arm; (3) paralysis of the face and tongue, with aphasia; (4) paralysis of the arm and face, with aphasia; (5) paralysis of arm and leg, and in a slight degree of the face and tongue; (6) paralysis of arm, leg, face, and tongue. I have at each post-mortem examination marked on a diagram the area of cortical disease, except in Case 3, in which for some reason I omitted to do so.

CASE 1. *Tubercular meningitis, with large crop of tubercles occupying the upper extremity of the two central convolutions of the right hemisphere, and producing left-sided convulsions and paralysis of the left leg.*—E. A——, aged nine, came under my care as an out-patient at St. Thomas's Hospital on September 15th, 1881. The assistant house-physician first saw the girl, and my attention was not called to her condition until some six weeks later. The diagnosis formed by him was hysteria (?). It appeared that she came of a fairly healthy family in which there were no known hereditary diseases, and that she herself had always had good health, except on one occasion, when she had been in hospital for fourteen days with blood-spitting. During the six weeks before she came to me as an out-patient she had had three peculiar attacks, in which she suffered from great giddiness, temporary loss of sight, and convulsions of the left arm and leg. After the fit passed off the left arm and leg were paralysed, and remained so for about an hour and a half. She then regained power, except in the left leg, which "dropped." In the intervals between these attacks she appeared to be fairly well, but she was getting worse when my attention was called to her on Oct. 27th, 1881. She was then evidently ill; she had had severe pain in the head for ten days, had been confined to bed and had vomited three times, but had had no convulsions. She was drowsy, her bowels were costive, and her temperature elevated. She had no loss of sensation, but had evident paresis of the left leg. There was no optic neuritis. The pupils were rather dilated and equal, acting well to light. There was no rigidity and no paralysis, except of the left leg. The patellar and plantar reflexes were normal. Temperature 102° F. Taches cérébrales well marked. Urine: specific gravity 1040; no albumen. The chest moved well, and the lungs presented no abnormal phenomena. Respiration 24. Heart sounds and area of dulness were natural. Pulse 84, and regular. Bowels confined; appetite bad; tongue dry in centre. She was now admitted into the hospital under Dr. Payne.—Oct. 31st: Did not appear so well, and was suffering from great pain in the head. The temperature was 100·8° F.; pulse 108, and feeble.—Nov. 1st: Temperature 102° F. Some photophobia, and diplopia when she looked straight in front of her; this was not constant. Pupils dilated and equal. Face a little flushed. Pulse 108, regular.—2nd: The pain in the head was worse, and the patient more drowsy. Temperature 101·2° F.; pulse 120. Tongue dry and brown.—3rd: Drowsiness still increasing; pain in the head better.—4th: Very hard to rouse the patient. Limbs flaccid, drop when raised; neither eye completely closed; partial paralysis of left external rectus. The tongue protruded markedly to the left. Pupils dilated, and not acting to light. Pulse 114, regular; respirations 36. Taches cérébrales well marked.—5th: The patient was unconscious; conjunctivæ insensible.—6th: The patient was very drowsy, but not unconscious. Some ptosis of right upper eyelid, and incomplete paralysis of both external recti. No optic neuritis, but the retinal veins large and tortuous. Temperature 98·6° F.—7th: Temperature 102·4°; pulse 120; urine passed involuntarily in bed. At 11 P.M. she was found lying unconscious, with the head arched backwards, the pupils dilated and equal; respiration 66;

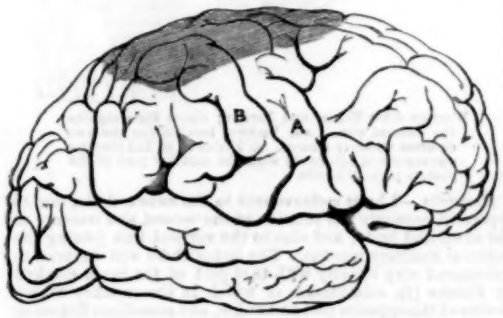
BEST COPY AVAI

pulse 144. The temperature gradually rose until on the 8th Nov. at 11 A.M. it reached 106·4°, and the patient died.

Post-mortem examination revealed a general tuberculosis, with very trivial pathological changes, except in the brain. There was the usual tubercular meningitis at the base, with minute tubercles in the fissure of Sylvius. Besides this there was moderate distension of the lateral ventricles with serum. There were, however, no tubercles in any other part of the brain, except in one region on the right—namely, in the anterior part of the superior parietal lobule, and in the upper extremity of the two ascending convolutions, as well as on the parts corresponding to these on the median aspect of the hemisphere. In these regions there was a very thick crop of grey miliary tubercles, closely packed together, and scattered here and there among them, especially on the median aspect of the brain, were yellow, caseous masses of the size of a rather large pin's head. Microscopic examination showed these to be typical tubercles, containing a very large number of giant-cells, and involving not only the membranes of the brain, but penetrating into its substance, and producing great hyperæmia and disorganisation.

Remarks.—This patient lived more than three months from the commencement of her illness. During the first ten weeks she simply had occasional epileptiform fits which were confined to the left side of the body, and which were followed by a very transient paralysis of both limbs on that side, and by permanent weakness of the left leg. During this period it is probable that there was nothing more than a local and slow growth of those larger caseous tubercles which were found at the post-mortem occupying the position marked in Fig. 1, and adjacent parts on the median aspect

FIG. 1.

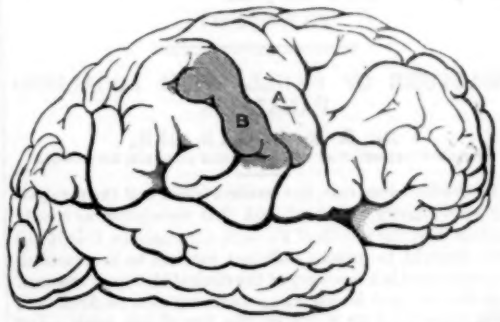


of the hemisphere; and as the patient was comparatively well in the intervals between these attacks it is not to be wondered at that the assistant house-physician should have found the case obscure. About three weeks before her death pain in the head, vomiting, elevation of temperature, drowsiness, and paralytic phenomena referable to disease at the base, indicated in all probability the commencement of a more general meningitis, of which she soon after died. The position of the tubercular growth on the vertex corresponds very accurately with the region marked by Ferrier as the centre for the lower extremity, and the absence of any loss of sensation, together with the history of convulsions, followed by a local paralysis, make the case a very typical instance of localised cortical lesions. An interesting point likewise illustrated by this case is the localising value of the position of the permanent as opposed to the transient paralysis. For in this case the whole of the left side was convulsed and temporarily paralysed, but only that part of the body which is in direct relation with the diseased cortical area remained permanently affected. Unfortunately there was no opportunity of seeing whether the convulsions commenced in the left leg.

CASE 2. *Softening of the right ascending parietal convolution, accompanied by tremors and permanent paralysis of the left arm, and by temporary tremor and paralysis of the left leg.*—P. B——, aged forty-six, was admitted into St. Thomas's Hospital under the care of Dr. Stone, on July 20th, 1878, suffering from chronic renal disease. She had considerable shortness of breath and œdema of the legs, and complained much of pain in the head and vomiting. The urine was scanty and contained a large quantity of albumen and many casts. The left ventricle of the heart was hypertrophied. She gradually improved under treatment, lost her dropsy, and left her bed in November. She subsequently relapsed, and it was in January, 1879, that symptoms of cerebral disease first manifested themselves. On the 18th of this month I made the following note. "The patient's mind is clearly wandering, and she complains of being unable to keep her left arm still. The nurse says that on lifting her out of bed she noticed that the left leg hung down and trailed on the floor. On examination the tongue is found to protrude very slightly to the left, and the left eye perhaps does not close quite perfectly. The movements of the left leg and arm are violent and disorderly, and sensation is decidedly impaired. When asked to put up the left hand to the face, she does so hesitatingly and with a series of jerks which have no constant rhythm or direction. The same occurs on voluntary movement of the left leg. The right arm and leg, on the contrary, are moved slowly and naturally." There were no changes to be found in the retina or optic disc. The jerking movements of the left leg and arm gradually subsided, until, on Jan. 30th, the leg was freely and naturally moved, but the arm was almost completely paralysed. She complained greatly of pain down the whole left side. General dropsy set in again, commencing in the left arm and leg, as soon as they were paralysed, and extending to the rest of the body, but the patient lived on until July 21st, 1879, when she died of profuse hæmorrhage from the bowels. The arm recovered some power, but remained considerably paralysed up to the time of her death, whereas the left leg was as strong as the right.

Post-mortem examination.—The kidneys weighed six ounces and a half, and were contracted and granular on the

FIG. 2.



surface. The heart weighed twenty-two ounces, and was free from valve disease. The arteries were very atheromatous. There was a recent pleurisy on the left side. Nothing was found to account for the intestinal hæmorrhage. On examining the brain, the longitudinal sinus was seen to be empty. The organ generally was œdematous. The vessels were very atheromatous, and the middle cerebral artery on the right side, though pervious, was smaller than its fellow on the left. The middle part of the ascending parietal convolution on the right side was very markedly softened, shrunken, and of an orange colour. The softening ceased three-quarters of an inch from the great longitudinal fissure, and stopped at least as much short of the Sylvian fissure. The disease was almost confined to this convolution, but extended slightly at its lower limit into the ascending frontal. The spinal cord appeared to the naked eye to be healthy.

Remarks.—The area of softening found post mortem in this case, and marked on Fig. 2, corresponds very accurately with part of Ferrier's centre for the arm, and extends a very short distance into the regions governing the movements of the face and leg. The symptoms presented by the patient were such as would be expected to result from such a lesion, and the connexion between the area occupied by the cortical disease and the seat of the permanent, as opposed to the temporary, paralysis is again illustrated. For although tremors and paresis affected the left leg at one time, they were only transient phenomena, and may be compared to the more severe convulsions and paralysis of the leg which were present temporarily in Case 1. The occurrence of localised tremors in cortical lesions is, I believe, unusual. In the

EST COPY AVAILABLE

Revue de Médecine for May, 1883, Dr. Demange, of Nancy, has a most interesting article on "Pre- and Post-hemiplegic Tremors," in which he shows by fatal cases that tremors of every kind may be present in lesions affecting any part of the motor tract, and he gives instances of their occurrence in connexion with purely cortical affections. The presence of some diminution of sensation is a point which requires special comment. This symptom is almost invariably absent in cortical lesions affecting the central convolutions, and I regret to find that my notes of this case only once make mention of it. I cannot remember whether it passed off or not. Subsequent reference is made to pain in the left arm, and also to the fact that dropsy set in again and commenced in the left arm and leg as soon as they were paralysed. This probably indicates that the cerebral lesion produced some neuro-vascular changes which resulted not only in œdema invading the limbs on the left before those on the right, but also in some alteration of sensation, which made itself evident first as anæsthesia, and later as pain. Two days ago I saw a case which shows that some such neuro-vascular changes may result from lesions producing hemiplegia. On going to the bedside of a patient who had had hemiplegia with slight rigidity for some months, I noticed that the paralysed arm was perspiring freely, whereas the opposite one was almost dry. On turning down the bed-clothes I found the same difference between the two legs and between the two sides of the trunk: the left leg was covered with beads of perspiration, whereas the right was almost dry. The difference of temperature often observed between the two sides in cases of hemiplegia is a fact of similar significance. Probably some degree of anæsthesia, or at any rate of paræsthesia, is a more frequent result of cortical affections than is generally supposed. The collection of cases which Charcot and Pitres have published affords several illustrations of this point.

(To be continued.)

FRACTURE OF SKULL, WITH LOCALISED PARALYSIS.

BY J. R. LOGAN, M.B.,
RESIDENT PHYSICIAN AT THE NORTHERN HOSPITAL, LIVERPOOL.

IN the following case, the cerebral lesion and the paralysis are so distinctly associated, and that association so clearly explained by the results of Ferrier's experiments, that it has been thought to possess sufficient interest to be recorded. The subjoined is a summary of the clinical history of the case.

J. M——, aged fifteen, came under my care on April 2nd, 1882, suffering from a cut on the top of his head. The injury had been caused by a blow from a belt armed with a heavy buckle, which had rendered the boy momentarily insensible and brought him to the ground. On getting up, he found, in addition to the cut on his head, that he was unable to use his left leg, and supposed that he had been kicked about the thigh. The wound on the head was two inches long, directed backwards and outwards, and was situated three-quarters of an inch behind a line passed perpendicularly from one external auditory meatus to the other; it was also a quarter of an inch to the right of the middle line. In the centre of this cut there was found to be a fissure of the skull about an inch long, into which the probe could be passed, without any pressure, for a quarter of an inch. The wound was dressed, and his leg was then examined, but no trace of injury was to be found. The patient was put to bed, and ice applied over the dressings, perfect rest being enjoined. The patient was visited next day, and again on April 4th, when he was carefully examined. The wound on the head was progressing favourably. There was no mark of injury whatever on the left leg, but it was found that there was complete loss of the power of voluntary movement in the toes and ankle of that side, while in the muscles which moved the knee there was distinct evidence of paresis. The hip-joint could be moved quite well. On tickling the left sole there was no plantar reflex, but the knee reflex was fairly well marked. Sensation was normal. The right leg presented no abnormality. The condition of the limb was now at once associated with the skull and brain injury.—5th: Patient in the same condition. — 8th: Wound gaping and grey; bone bare. Pulse 80; respiration 16; temperature 98° F. — 10th: Wound improving; plantar and knee reflex as before. On rapidly flexing the left ankle very slight ankle clonus is set up. — 12th: Patient can now walk across the floor fairly well, but is still quite unable to move the ankle-joint voluntarily; the knee, however, is well under command. The foot is inverted in walking. The muscles of the calf are found to be soft, flabby, and diminished in volume, contrasting markedly with those of the opposite side. Ankle clonus rather more marked.—15th: Ankle clonus now well marked; otherwise the patient is in the same condition. — 18th: Patient can now walk about with ease; the toes are still turned in (said, however, to have been so before the accident). The calf of the leg is less atrophied, but the ankle clonus still exists; wound almost healed. — The patient was seen about a month later, and found to be perfectly well, with no ankle clonus or loss of power whatsoever; the calves of both legs are equal in size. He was also seen on Dec. 16th, and appeared to be quite well.

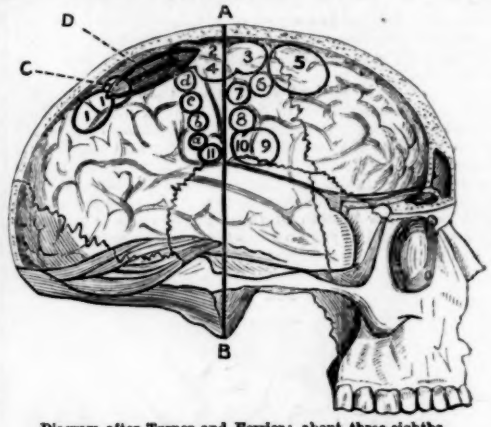


Diagram after Turner and Ferrier; about three-eighths the natural size. A B, Vertical line joining the two external auditory meatus. C, The cut. D, The fracture corresponding externally with the anterior part of the postero-parietal lobule.

Remarks.—I have endeavoured in the annexed diagram to represent precisely the relation of the wound and fracture to the skull and brain, and also to the vertical line joining the external auditory meatus. The lesion there will be seen to correspond very exactly with that part of the brain marked by Ferrier (1), stimulation of which in the monkey causes flexion of the opposite foot and ankle, and *sometimes* flexion of the thigh upon the abdomen (as in walking). The movements of the lower part of the limb are more constant, and in this case it is interesting to observe that the knee was less affected than the lower parts, and the hip quite unimpaired in its movements. The distinct ankle clonus, as evidence of descending lateral degeneration of the spinal cord, and the atrophy of the muscles of the calf coming on on the seventh and ninth days respectively, are additional noteworthy features; and the speedy, total, and permanent removal of all these abnormalities renders the case very satisfactory. The lesion is also more limited than any of those affecting the lower limbs recorded by Ferrier in his "Localisation of Cerebral Lesions," as no other part whatever was affected than those referred to.

Liverpool.

METHOD OF RELIEVING THE

IRRITATION CAUSED BY CONTACT OF THE EYELASHES WITH THE EYEBALL IN SIMPLE OR SENILE ENTROPION.

BY CHARLES BELL TAYLOR, M.D., F.R.C.S.E.,
SURGEON TO THE NOTTINGHAM AND MIDLAND EYE INFIRMARY.

THE upper or lower eyelid may be turned inwards, but the lower lid is by far the most frequently affected; the points of the lashes may touch the globe, the whole may sweep the conjunctiva, or the inversion may be so complete that the eyelashes are turned into the conjunctival sac.

In the last case any irritation that may arise is due more to the roughened skin and the retention of tears than to the lashes themselves. Destruction of the conjunctival mucous membrane will cause the lashes to turn inwards, just as destruction of the skin of the eyelid will draw them outwards; inversion of lids is, however, often caused by spasmodic closure of the eye, such as is occasioned by the irritation of an operation, or the impact of a foreign body. When the eyeball falls backwards in the socket from absorption of orbital fat, a condition frequently observed in aged persons, the eyelids from loss of support frequently turn inwards. This happens invariably after extirpation of the eyeball, and is only to be remedied by an artificial globe. Any tendency to inversion is of course much exaggerated if the patient forcibly closes the lids, or is injudiciously bandaged, and this accident frequently complicates the results in cataract operations. The accompanying woodcut

represents a patient who has undergone the operation of extraction for cataract in both eyes. The right, which was operated upon in an ophthalmic institution elsewhere, was lost from subsequent inflammation, due in great measure to the persistent irritation occasioned by inturned lashes; the left was operated upon by myself in February this year, and it was to remedy a similar condition that the steel clip therein depicted was applied.

Various remedies and methods of treating this condition have been recommended and adopted by surgeons from time immemorial: collodion, sticking plaster, bandaging with pads, or by operative procedure either by single or double suture, or the excision of a portion of skin. The first have the disadvantage of being ineffectual, and the second are objected to by the patient as involving another operation and additional pain; in fact, several patients have assured me that the excision of a piece of skin was more painful than the operation of extraction for cataract itself. In view of these facts, it has appeared to me that a simple method of preventing the inturning of the lashes was a desideratum, and I have for some time past adopted the use of a simple clip, such as is depicted in the engraving, which is painless and at the same time effectual; in fact, the patient had worn the instrument some weeks when his photograph was taken. Not only is inversion at once relieved, but by wearing the instrument for a short time the patients are frequently cured. Even when this is not the case, and it becomes necessary to remove a portion of skin, the excision of tissue which has been for some time compressed is comparatively painless, and patients do not object to an operation so much after recovery of sight and health and spirits as they do when suffering from the depressing effects of a recent cataract operation, which may or may not turn out well. In dismissing patients after operation, if I see any tendency to inversion of the lids I give them one of these simple instruments with instructions how to use it in case of necessity, and have found in a few instances that the evil results of inversion have thus been averted.

Nottingham.

ON A CASE OF

DELIRIUM TREMENS ASSOCIATED WITH MUCO-ENTERITIS, CLOSELY SIMULATING TYPHOID FEVER.

BY J. T. DILLON, M.D., M.CH.

THE following notes of a case of delirium tremens with unusually severe complications, ending in recovery, are of interest in some respects. The patient, a man in easy circumstances, aged about forty-five years, up to the date of the present attack always enjoyed good health. He was of steady and temperate habits till within about four or five months of his present illness, when he sustained a great domestic bereavement by the death of a member of his family to whom he was deeply attached. Since then he had drunk very freely, but being a man of a splendid physique and of robust constitution, he did not appear to have suffered much from his over-indulgence till about two or three weeks before he came under my treatment, when he began to suffer from occasional attacks of vomiting and diarrhœa, with entire loss of appetite. Sleep, too, began to forsake him, and when I was called to see him I found him, after a restless night, wandering, incoherent, and delirious. His pulse, feeble, was 130; temperature 102°; tongue covered with brown fur, red at tip and edges; conjunctiva and skin deeply jaundiced; there was slight tympanites with diarrhœa and painful tenesmus. I ordered him opiate draughts with milk and lime-water, and bismuth. After giving the opiates a fair trial, and they failing to procure any sleep, the pulse, too, becoming quicker and more feeble, I put him on ether and digitalis. This had a decidedly beneficial action on his circulation, and I now prescribed hydrate of chloral with bromide of potassium; this, too, after a fair trial, failed in procuring any rest, and I now had recourse to the subcutaneous injection of one grain of morphia, which succeeded admirably in securing him a tranquil sleep of several hours. He awoke quite refreshed, was perfectly intelligent, and answered every question in a rational manner. I now found almost the entire left lung and the base of the right in a state of hepatisation. The diarrhœa still continued, notwithstanding all the opium he had taken; the motions were small in quantity (characteristic feature of typhoid), accompanied with severe pain and very troublesome tenesmus. There were a few rose-coloured spots over the back, and were it not for the information derived from the history of the case, the absence of iliac tenderness, and the aid derived from the thermometer, I should have been inclined to think by this time that I had to deal with a case of typhoid fever. I now put him on sulphuric acid and bark, with poultices of Iceland moss applied over the lungs. After eight or nine days resolution began to take place in the lungs, and proceeded slowly. The jaundice and diarrhœa were still present, despite active treatment directed to the latter. He complained of severe pain over the bladder from time to time, which he sometimes referred to the testes. He took plenty of fluid nourishment, and slept well except when troubled with the stools. After treatment extending over a fortnight, the tongue being clean, the pulse and temperature normal, and the skin and conjunctiva having resumed their normal hue, I put him on solid food; this had the effect of reducing the number of motions from a dozen or more in the twenty-four hours to three or four. They now rapidly resumed their natural appearance, and convalescence became quickly established.

There are many features of interest in this case. The uncontrollable diarrhœa associated with jaundice of hepatic origin is extremely rare. The case presented many of the symptoms of typhoid fever. The extensive and insidious nature of the pulmonary affection are points worthy of con-

sideration. There were no symptoms present at any time to direct attention to the chest—neither pain, cough, dyspnœa, nor expectoration.

The case was a severe and complicated one throughout, all the symptoms were brought on by free living, the jaundice and diarrhœa being the fruits of a troublesome gastro-duodenal and intestinal catarrh.

Listowel.

ON A CASE OF HYDROPHOBIA.

By W. MITCHELL ROOCROFT, M.R.C.S., &c.,
HONORARY SURGEON TO THE ROYAL ALBERT EDWARD INFIRMARY, WIGAN.

HYDROPHOBIA being a disease of comparative rarity, I venture to hope that the following notes of a case occurring in my practice may be of interest.

John F——, aged twenty-eight years, a groom and coachman, was bitten by a bloodhound bitch on June 21st, 1883. He was a steady and temperate man, having previously enjoyed good health, but of nervous temperament. I saw the patient next day. He was suffering from mental anxiety, and had a punctured and lacerated wound on the upper lip, which had been thoroughly cauterised with nitrate of silver by a surgeon, to whom he had immediately hurried upon receipt of the injury. At the urgent request of the patient, I examined the bitch. I found her chained up, and with difficulty induced her to leave the kennel, as she seemed to shun the light, and was dull, but snappish. The coat was staring, and the abdomen tucked up. Appetite was lost, but evidently she could drink without much difficulty. I detected no modification in the bark, and although her head was depressed, the jaw had not dropped from paralysis. She had bitten a fox terrier dog on the previous day. I advised that the animal be removed to an adjoining kennel, where she could be watched and prevented from inflicting further harm, but not to destroy her. Although the symptoms were those of incipient rabies, I was anxious to watch for the full development of the disease. Unfortunately popular prejudice was too strong, and the bitch was shot the same afternoon. The wound on my patient's lip healed completely, and he seemed to regain his usual health, though his friends remarked that at times he was nervous and depressed. On Sunday, July 29th, it was noticed that the patient was peevish, irritable, and low spirited, complaining of alternate chills and heats, with anorexia. It may here be noticed that the period of incubation or "delitescence" was thirty-eight days; in a previous case under my care the limit was from thirty-nine to forty days. I was sent for hurriedly to see the patient on the morning of August 1st. He had passed a very bad night, having had little or no sleep, repeatedly jumping up with what he termed "bad dreams." The stage of "recrudescence," as it has been termed, was rapidly passing away, and I found him in bed with an anxious expression on his face. There was no redness or irritability about the wound, which presented a healthy cicatrix, and I could not detect any affection of the submaxillary, deep parotid, or cervical lymphatic glands. He complained of a feeling of oppression about the chest, with severe pains in the epigastrium, due, I thought, to spasm of the diaphragm; but upon auscultation I discovered in addition evidence of acute endocarditis, with a mitral systolic murmur. This murmur increased in intensity as the disease progressed. There was no history of a previous attack of acute articular rheumatism. I noticed involuntary deep sighing inspirations from time to time. Temperature in axilla 100·2°. Tongue dry, but clean; bowels regular; complete anorexia; pulse regular, but laboured; face flushed; head hot and aching; only very slight difficulty in swallowing; urine normal, but scanty. I ordered warm applications to the cardiac region and epigastrium, small quantities of strong beef-tea and milk, complete rest and quietness, and the following draught:—Thirty grains of hydrate of chloral, thirty grains of bromide of potassium, half a drachm of tincture of digitalis, in an ounce of orange water. He was seen again in the evening, when the symptoms were about the same, but he had had a little sleep, and was quieter; had swallowed a little beef-tea, but was becoming more thirsty. The draught to be repeated.—August 2nd: Much worse since 5 A.M.; no sleep; expression of face intensely anxious and much flushed. Temperature 101°. Is bathed in a profuse perspiration; mitral murmur intensified; pulse weak, and almost uncountable. He cannot now swallow, owing to the spasmodic action of the muscles of deglutition and respiration; in fact, the very sight of water, and his hearing me pour out a draught containing thirty grains of bromide of potassium and half a drachm of tincture of cannabis indicus, was sufficient to bring on a most agonising spasm. These attacks were accompanied by fits of violent mania, during which it was almost impossible to keep him in bed, followed by intervals when the intellect was quite clear. During these remissions I discovered that when I induced him to shut his eyes he could swallow small quantities of the draught without much difficulty. I now ordered ice-bags to be applied along the spine, the room to be completely darkened, and the bed surrounded by light curtains, for I noticed that hyperæsthesia of the surface and of the special organs was rapidly manifesting itself. He gradually became worse, and appealed piteously for those in the room not to move or cause any draught, the slightest movement or breath of air being sufficient to bring on most frightful spasms of the muscles of deglutition and respiration, the diaphragm being in a state of intense clonic spasm. Thirst was now most agonising, and his mouth, dry and parched, was constantly filling with viscid, clammy saliva, the efforts to expectorate which only increased the frequency of the spasms. The condition of the patient was rapidly becoming worse, and I felt that the condition of his heart would not justify me in the administration of chloroform by inhalation (a course I adopted in my previous case, but with no better result), so at 11 A.M. I gave half a grain of morphia hypodermically. It was not until twelve o'clock that the morphia had any appreciable sedative effect. The patient gradually sank and died at 1.45 P.M. the same day from syncope. I regret that I was unable to obtain a post-mortem examination of the body.

In conclusion, I may mention that the fox-terrier bitten by the same bloodhound died from acute rabies on the same afternoon as my patient. I am unable to account satisfactorily for the etiology of the acute endocarditis in this case. It may have been merely an accidental coincidence. I am afraid my case only illustrates too painfully our present inability to ward off a fatal issue in this dreadful disease.

Wigan.

AMENORRHŒA DEPENDING ON ABSENCE OF THE UTERUS.

By J. L. VAN GEYZEL, M.B., C.M.,
SURGEON, INDIAN MEDICAL DEPARTMENT.

THE social consequences to a married Brahmin female of the existence of any bar to pregnancy are, I believe, of a far more serious nature in India than in any other country in the world. The Brahmin law provides for the perpetuation of families by permitting a man to take a second wife when a first wife has no issue after a reasonable period of married life; this is always taken advantage of, so that it is not difficult to surmise the relative position of the first wife in such a household, where she would be treated as the "waiting maid," if she does not return to her friends to live in disgrace and widowhood. Apart from this interest in a case, where an opinion fraught with such serious consequences should be well considered and weighed, the rarity of the occurrence of instances of absence of the uterus, discovered during life, has induced me to record the following notes of a case which I was asked to see by the civil surgeon:—

A. B——, a Brahmin female, married, aged twenty years, sought advice on account of sterility, stating at the same time that there was some obstacle to complete sexual intercourse. Previous history as related by the civil surgeon:—General health has always been good; but she has never menstruated, though since April, 1882, she has experienced, from time to time, symptoms known as "the menstrual molimen." What the consummate ignorance of native hakeems and barber women could accomplish was resorted to before applying for European advice, and she had been advised to try to dilate the urethra, as the small size of the vagina was thought to be the cause of sterility. By means of pieces of pith she had succeeded in dilating the urethra, and no doubt intercourse took place through

this passage, till one day (about twelve months ago) she applied at the Civil Dispensary for relief, the piece of pith having slipped into the bladder. The forefinger was easily introduced through the urethra into the bladder, and, by hooking the piece of pith between the flexed joints of the finger, its withdrawal was effected. Beyond slight incontinence of urine for three or four days, nothing of any consequence followed, and she was discharged as well as ever. No further interference was desired at the time, and none was allowed. Since then she has been much the same as before.

Present state. — She is of middle stature, well-formed, plump, and the possessor of a good female figure, breasts full and round, naturally developed, voice feminine. She experiences distinct fulness of breasts, pain in loins, and feeling of slight malaise for four or five days at regular intervals, varying from twenty-five to twenty-eight days; but she has never had a discharge of any sort at or about these times. Sexual appetite is admitted. On making a vaginal examination the forefinger passed in to about half way between the flexures of the distal and second joints, when its point impinged against a membrane, which could be carried before the point of the finger till the latter entered the vagina to just past the flexure of the second joint (about two inches). Further progress was impossible without using force and causing pain. Now, by carefully sweeping the finger all round, the obstructing membrane was traced to be continuous with the vaginal walls, and a most careful search with the point of the finger failed to discover any trace whatever of an opening. There was no feeling of solidity or fluctuation behind this membrane or anywhere round the vaginal walls. The hand over the pubes failed to detect anything solid between the internal and external fingers, which could meet by pressure over the pubes. The forefinger introduced into the rectum (previously emptied) failed to find the slightest clue to the presence of the uterus, nor could this method with external abdominal palpation succeed in discovering this organ.

An ocular examination of the external genitals was next made, and the following points noted:—External organs all present; labia not quite fully developed in proportion to the general development of the body; clitoris small; the urethral orifice had radiating folds of mucous membrane surrounding it; giving one the idea of there being slight prolapse of this passage; the vaginal orifice was very small, but easily dilatable; no hymen present. A duck-bill speculum was introduced into the vagina as far as it would go, and nothing could be seen except receding and advancing pink walls ending in a blind pouch. With the speculum *in situ* the finger failed to discover anything fresh, and no opening could be felt or seen in the terminating membrane or vaginal walls. A sound was next introduced into the bladder and the right forefinger introduced into the rectum, as high up as possible, and by very slightly moving the handle of the sound its tip was felt by the finger quite readily, and the course of the sound in the bladder could be easily made out by continuous contact along it with the rectal finger, till the vaginal cul-de-sac could be felt intervening by a feeling of increased thickening of the media between the sound and the finger. By lateral and antero-posterior movements within the bladder, and side to side in the pelvis, the point of the sound could be readily reached and its course traced along by the rectal finger, but no intervening solid body, such as any part of the uterus, could be made out. A careful exploration in all directions failed to detect anything like a solid body, large or small, between the bladder and rectum; indeed the great ease with which the sound could be felt in all directions by the finger in the rectum, and the thinness of the intervening media between the metallic sound and the fleshy finger left no doubt as to the fact that the bladder was lying on the rectum without the interposition of anything, except, anteriorly, the vaginal cul-de-sac.

I may add that, with the seriousness of the consequences to the patient before us, the examination was as careful and thorough as possible, and in order that nothing might be overlooked or mistaken the civil surgeon repeated for himself each step of the examination before going on to the next; and as we were able to agree in every particular in the diagnosis, no doubt was entertained as to its accuracy, and accordingly a decided opinion was given. As the value of the record of such a case as this would be enhanced by the minuteness with which all its particulars were noted, I have endeavoured to detail carefully every step in the process of examination and diagnosis.

Remarks.—The points involved in the consideration of the diagnosis may be briefly summed up as follow. All cases of amenorrhœa belong practically to one of two classes. Class A, where menstruation has never been performed, or only imperfectly. Class B, where menstruation has been performed, but has now ceased or is irregularly performed. The present case of course belongs to Class A, and the various causes considered likely to give rise to this class of cases are briefly:—1. Causes obstructing the flow of menstrual discharges chiefly: (*a*) imperforate hymen; (*b*) occlusion of vagina; (*c*) occlusion of os uteri. 2. Causes depending on absence or imperfect development of: (*a*) ovaries; (*b*) uterus.

1. There were no signs of obstruction to the menstrual flow present; abdomen was of natural size, and manual examination was easily conducted, as the abdominal walls gave readily on pressure, and pain of any sort was absent. No signs of accumulation of menstrual discharge could be made out per rectum, per vaginam, or by palpation. (*a*) The obstructing membrane was too far in for a hymen, and it was clearly the end of the cul-de-sac. The hymen was absent, as intercourse was practicable. (*b*) Absence of a history of previous vaginal inflammation—idiopathic, traumatic, or post-partum—tells against vaginal occlusion by adhesion &c.; and as to sloughing and adhesion of the parts in early life, occlusion resulting from this state of matters is usually met with at or near the vulva, while in the present case there was no obstruction till the finger passed in about two inches. (*c*) No os uteri could be felt or seen, and if one existed at all, the os would be behind the cul-de-sac, and if occlusion of the os were still present under these circumstances, signs of accumulation of menses within the uterus would be present, which, I need hardly add, was not the case.

2. (*a*) As to the condition of the ovaries a fair guess may be allowed. The presence of menstrual molimina since April last year, with natural development of the figure and breasts, and the existence of sexual desire, point to the inference that the ovaries are present, and most probably in an imperfectly developed condition; and as she has lived with her husband for the past three years, and menstrual molimina have appeared during the last fourteen months, it is also reasonable to suppose that sexual intercourse has acted as an ovarian stimulus. (*b*) By exclusion the last cause referring to the uterus itself is arrived at. The validity of this is supported by there being no uterus felt at the end of the vagina, and no trace of it being discoverable by bimanual examination, per rectum, per vaginam, or per rectum et vesicam. The uterus may, of course, be present in an extremely rudimentary condition, in the form of a small collection of non-striated muscular fibres between peritoneal folds, and fail to be discovered by the methods of examination available in a living subject; but the facts viewed together, that the vagina is shorter than natural, and ends in a cul-de-sac, that the external genitals are disproportionately small, that strong presumptive evidence exists of an imperfectly developed condition of ovaries, and that the uterus is not discoverable on careful examination by the methods at our disposal—these facts combined form, at least for all practical purposes, a chain of strong evidence that the uterus is absent.

EXOPHTHALMIC GOITRE: CURE.

BY EDWIN PAYNE, M.D., M.R.C.P. LOND.,
PHYSICIAN TO THE MARGARET-STREET INFIRMARY FOR CHEST DISEASE.

FROM February to September 28th, 1882, I attended, in conjunction with Dr. T. S. Byass, a young lady, aged twenty-five, suffering from exophthalmic goitre. The eyes were very prominent. The whole of the thyroid gland was very much enlarged, especially on the left side. There was excessive overaction of the heart, and for about two months it presented physical signs of enlargement, and particularly its apex beat was to be noticed a little to the left of the nipple. There were abnormal sounds, diastolic and systolic, both at the mitral and aortic valves, of a soft, rushing character, and violent beating of the carotids and jugulars, with at times a cyanotic condition of the face and attacks of dyspnœa, but no headache. She had been getting out of health for a few months, and had been away for change; but, on returning home, was found to be in the above condition, and excessively wasted, so that it was necessary to place her on a water-bed for some four weeks.

Another troublesome complication in this case was sickness; there was also considerable emotional excitement and irritability.

She has now (August, 1883) perfectly recovered, and can walk about and occupy herself with her usual amusements, being careful to avoid overexertion. The condition of general nutrition is quite restored, the goitre has disappeared, and the heart is normal in valve sounds, apex beat, and rhythm; the disordered action in the carotids and jugulars has ceased; the eyes are, for her, quite natural in appearance and prominence. She always had a slightly prominent eye; there is at times, if she is exhausted, some emotional excitement.

The treatment which was found useful in this case was digitalis with iron, which helped to quiet the tumultuous action of the heart; ice was also invaluable at one and an early period to control the sickness; cold was applied to the goitre, and pepsine aided the assimilation of food, which was given in some form night as well as day. Small quantities of brandy at strictly regulated periods were also taken; rest and quiet were strictly observed; occasional relief of the bowels by means of blue pill, colocynth, and scammony was found to be necessary and beneficial. She is now taking pepsine and the pills occasionally.

This is an interesting case, as illustrating the return to health in a typical case of its kind, but with a markedly important cardiac condition, and its return to a normal state from one of unusual disturbance. In these cases there is generally no secondary dilatation or hypertrophy, the symptoms of which at one period were of such serious import as to suggest considerable mischief, and even endocardial ulceration in association.

Was there in this case, it might be asked, any temporary hypertrophy as well as dilatation of the heart? There was for more than a month a heaving movement on palpation over the cardiac region, which gradually diminished with the general improvement. It seems from observations made that hypertrophied heart can be recovered from. Dr. Munk has recorded some interesting cases in THE LANCET for 1846, with comments, showing that hypertrophy of the heart may be cured, though these cases do not appear to have been associated with the peculiar condition known as exophthalmic goitre. Is the pathology in cases of exophthalmic goitre constantly an uncomplicated "sub-paralytic state of the vessels of the muscles of the heart?" May it not be well to be on one's guard for a condition of hypertrophy as a possibility in some cases?

Southampton-street, W.C.

SUPPRESSION OF URINE IN A CHILD LASTING FIVE DAYS; RECOVERY.

By HERBERT E. PAXON, M.R.C.S.

SAMUEL C——, aged six, a pale, anæmic-looking child, was brought to me by his mother on the evening of Jan. 5th, with the statement that he "could not make water," and had passed none since the previous Thursday morning. The mother attributed the suppression to his having "caught cold." He was given a mixture containing bicarbonate of potash, tincture of hyoscyamus, and spirit of nitrous ether, and warm baths and linseed poultices over the loins were likewise ordered. I heard nothing whatever of the case until the following Sunday evening, when the mother came to my surgery and requested me to come and see her boy, as "he had not voided water and was very ill." Upon my arrival at the house, I found the child in great pain, so much so as to cause him to cry a great deal, and was informed that he was unable to pass his water, in spite of repeated efforts to micturate. Upon examination, I found no distension of the bladder; the percussion above the pubes for some inches was dull. In order to ascertain whether there was any urethral obstruction (as, for instance, urethral calculus), I administered chloroform, and passed, with great difficulty, a No. 5 gum-elastic catheter, but with a negative result. I then placed the child in a warm bath for some minutes, but with no relief to the symptoms. He was given three grains of calomel and a diuretic mixture containing ten minims of tincture of digitalis, and one scruple of acetate of potash with camphor water, every four hours, together with repeated warm baths and poultices to the loins. The next morning (Jan. 8th) I saw him at 10 A.M., and found no amelioration of the symptoms. He had passed no urine, had been very restless and drowsy, had vomited once or twice in the night, and had been in very severe pain. Beyond these symptoms there appeared no definite indication of the uræmic condition. The tongue was furred, and the bowels had been once relieved. I then gave the child a hypodermic injection of pilocarpine (one-tenth of a grain), and ordered the diuretic mixture to be continued, together with the warm baths and poultices. He was also given brandy-and-milk, in teaspoonfuls, every hour. I saw the patient again three hours afterwards, and found no alteration in his condition. No diaphoresis had occurred. He had vomited once. The drowsiness continued, but no convulsions had supervened. Upon my evening visit (9 P.M.) I found him very restless, in great pain, drowsy, and with the pupils widely dilated and fixed. He had had no convulsions, but occasional vomiting. The mother directed my attention to a swelling in the lumbar region, a soft, semi-fluctuating swelling, oval in shape, and about the size of a lemon, situated midway between the kidneys. This had appeared since my last visit. I repeated the injection of one-tenth of a grain of pilocarpine, and ordered a poultice to the swelling and the continuance of the warm baths. The brandy-and-milk and diuretic mixture also to be continued more frequently. The following day (Jan. 9th) I was informed by the mother on my morning visit that the child had passed about a pint of dark-coloured urine (shown to me); that he had passed it with excruciating pain after a very restless night, with occasional vomiting. The child's condition appeared unchanged; the swelling, however, had disappeared. With the occurrence of a relapse two days afterwards, lasting twenty-four hours, the normal renal action was re-established, on which occasion the injection of pilocarpine was repeated, this time one-fifth of a grain was given, with the result of restoring the secretion.

It is interesting to note, in this case, the absence of diaphoresis consequent upon the injection of pilocarpine, the diuretic properties of the drug being more apparent. I may mention, however, that on the second injection slight diaphoresis was evident upon the face. The absence of uræmic symptoms is also noteworthy.

Dorking.

UNDETECTED CANCER OF THE STOMACH.

By J. B. PIKE, L.R.C.P.ED., M.R.C.S.

THE following two cases resemble each other in the fact that serious cancerous disease existed without any prominent symptoms, and was undetected until revealed by post-mortem examination. The second case is also remarkable for the tolerance shown by the diseased stomach of somewhat indigestible food, and for the extreme age of the patient.

When helping Mr. W. R. Pike, of Southsea, in his practice some years ago, I was called to a patient of middle age, a sailor by calling, whom I found in a state of extreme collapse, threatening instant death. The history was that he had usually enjoyed good health, but had suffered at times from what he thought to be colic, but that he had never been ill enough to go into hospital. All treatment was unavailing, and in a few hours the patient died. The post-mortem revealed commencing peritonitis, scirrhus of the pylorus, and a large perforation where ulceration had taken place. The perforation was immediately caused by the man slipping from the kerb-stone in making way for a lady to pass.

The second case was that of an old bedridden patient in her eighty-fourth year. She had occasionally applied for treatment for diarrhœa, which was easily checked by a chalk mixture, and had no other prominent symptom excepting some loss of flesh. She was able to eat almost anything. On June 28th, 1883, I was informed that she was dying, and very shortly saw her. She had been vomiting blood, and during my stay again brought up a large quantity. The first vomiting occurred about 10 A.M., and she died at 1 P.M. the same day.

On post-mortem examination, the body was found emaciated. Heart fatty and friable, and pericardium containing a considerable quantity of serum. Lungs healthy. Pyloric end of stomach and adjacent part of liver a mass of cancer. Stomach partly filled with blood, poured out from a vessel

which had been opened by ulceration. Shortly before death the patient had taken bread, toasted cheese, and beer.

These cases illustrate the insidious nature of pyloric cancer, and two methods by which it may end fatally.

Loughborough.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

CASES OF STRANGULATED HERNIA.

(Under the care of Mr. HULKE.)

THE many variations in their anatomical and pathological circumstances which herniæ offer have ever given to them a peculiar interest. The first of the following cases illustrates a not infrequent complication of the ordinary form of congenital scrotal rupture—a constriction of the sac at some distance below the external abdominal ring separating an upper from a lower compartment, the tunica vaginalis enclosing the testis. Such constriction, more than one may be present, marks a spot where there has been an approach to obliteration of the tube of the funicular process. Its significance in relation to strangulation is evidenced by the greater intensity of the congestion &c. usually found in those parts of the protruded viscera occupying the sac below it, and also by the resistance it offers to their extrication and replacement in the belly after their complete liberation from constriction at the abdominal rings, an impediment which deceptively simulates that caused by adhesions of the viscera to the bottom of the sac or testis. Perhaps such complications account in some measure for the greater mortality of strangulated congenital ruptures noticed by more than one writer of eminence. The anatomical circumstances in the second case nearly resembled those in the first. The third case illustrates a very frequent event: the supervention of hernia upon retention of the testis in the inguinal canal. In the fourth case the inconveniences incidental to this *error loci*, together with the evidently imperfectly developed condition of the organ, justified its removal, a measure the propriety of which would have been doubtful had the organ been sufficiently mobile to have allowed its being drawn down out of the inguinal canal and planted in the scrotum, or even replaced in the belly. The fourth case exemplifies one of the gravest accidents that can happen in connexion with a strangulated hernia—its reduction *en bloc* or *en masse*, by an improper use of the taxis, not infrequently by the efforts of an unskilful patient, who in his anxiety and suffering makes violent and ill-directed pressure in his attempts to reduce the hernia. After such an accident the surgeon who then first sees the patient, and is not informed of the previous circumstances, may, in the absence of an external hernial swelling, pardonably ascribe the symptoms to an internal intestinal obstruction. But reduction *en bloc* may also occur in herniotomy where the sac is not opened, and a thin shell of fascia or condensed subserous tissue external to the sac has been mistaken for this latter, in which case after liberation of every constriction at the abdominal openings, the sac still enclosing the protruded viscera may by injudicious pressure (which need not, however, necessarily be great) be detached from its surrounding connexions, and slip up within the belly. This accident (which, oddly enough, was thought by an eminent author to occur only in inguinal hernia) appears to be more frequent in the femoral variety. Three instances of this occurred within the writer's knowledge in the course of one year in the practice of three surgeons, two of whom had a large experience in herniotomy, and the third one had already operated in several cases. In two of these cases persistence of symptoms caused a suspicion of the accident. The wound was opened up, the unopened sac, with its neck girthing tightly the intestine within it, was found outside the peritoneal cavity, below the pelvic brim brought into view and opened; the stricture formed by the neck of the sac was divided, and the gut replaced in the belly, but too late to avert a fatal issue. Of three cases within the writer's knowledge of reduction *en bloc* of inguinal herniæ by improper taxis, two of the patients were males; in the other case, the rupture had habitually distended the left labium pudendi. The persistence of symptoms of obstruction, after an apparently successful reduction of the rupture, led to an exploration of the inguinal canal. The sac was found above the position of the internal abdominal ring, in a subserous space between the peritoneum and fascia transversalis. It was brought down, opened, and the intestine was liberated and reduced, but in this case also the error was recognised too late to save the patient's life. The interest of the fifth case lies in the early time of the operation—one hour after the occurrence of strangulation. Here, in view of the urgency of the symptoms, any delay would have been dangerous.

CASE 1. *Strangulated Congenital Scrotal Rupture; Hour-glass Contraction of the Sac; Herniotomy; Recovery.*—On June 12th, 1882, a cabinet-maker, aged twenty-five, who had previously occasionally noticed a fulness in his left groin, fell whilst running. He instantly felt severe pain in that region, and had great nausea. He found his scrotum swollen, and soon began to vomit. Two hours after the accident he was admitted into the hospital. The right inguinal canal and corresponding side of the scrotum were distended by a rupture, the scrotal portion of which, by its tenseness and the absence of impulse, was unmistakably strangulated, but this could not be certainly ascertained with respect to the inguinal portion. His suffering was very great; he writhed with pain; and he retched frequently. Anæsthesia was induced with ether, and, the taxis failing, herniotomy was at once performed. Reduction proved impracticable until the sac had been opened, when the obstacle was found to be a diaphragm-like septum, which subdivided the scrotal portion into an upper and a lower compartment, the latter of which also contained the testis. Division of the edge of the small opening in this septum liberated a knuckle of very congested small intestine, after which reduction was easily effected. On the 30th of the same month the man left the hospital convalescent.

CASE 2. *Strangulated Bubonocele; Serous Distension of the Scrotal Parts of the Funicular Process; Herniotomy; Hæmorrhage on the following day necessitating opening up of the Wound; Recovery.*—A man, aged twenty-three, received through his horse falling a severe blow in the right groin, causing intense pain there. After a few minutes this abated so that he was able to remount and ride home, but three hours later it returned with increased intensity and he then began to vomit. On the following morning he was first seen by a doctor, who recognised the presence of a rupture and tried the taxis and ice, and as these measures failed he sent the man into hospital. Upon admission, about twenty-four hours after the injury, his right inguinal canal was found occupied by a very tense, painful, and tender swelling, from which a painless, less tense, fluctuating, oblong process, extended through the external abdominal ring into the scrotum. As the symptoms were acute and the strangulation had already lasted twenty-four hours, the rupture was immediately submitted to operation. The inguinal parts enclosed a knuckle of small intestine intensely congested. The scrotal part contained only serum. It communicated with the inguinal at the external ring by a circular opening of the size of a No. 10 catheter. The strangulation was at the internal abdominal ring external to the sac. In the following afternoon hæmorrhage occurred so free that the house-surgeon felt compelled to open the wound. The bleeding proceeded from several small arteries in the scrotal incision; they were secured. The bowels acted first on the thirteenth day, and on the twenty-third day the man was dismissed convalescent. The occurrence of such hæmorrhage is very exceptional.

CASE 3. *Retained Testis; Strangulated Bubonocele; Herniotomy; Removal of Testis; Peritonitis; Recovery.* (From notes by the dresser, Mr. Stace.)—An engineer, aged twenty-one, whose right testis had not descended into the scrotum, whilst straining in the watercloset suddenly felt pain in his right groin, and placing his hand there found a swelling. Within a few minutes of this occurrence he vomited, and he was sick again later in the day. Suffering acutely he took two opening pills, and as those did not act and his distress grew greater he was brought next day to the

hospital. His right inguinal canal was occupied by an excessively tender, painful swelling, the lower end of which protruded slightly through the external abdominal rings. The intensity of the pain in the belly would not let him lie still, but he tossed about restlessly in bed. His face was pale and his pulse quick, small, and weak. There could not be any doubt that the swelling was an acutely strangulated bubonocele. Ether was given, the taxis gently tried for a couple of minutes, and failing, herniotomy was immediately done. The sac contained about an ounce and a half of turbid bloody serum and a knuckle of distended, purplish-brown small intestine. The constriction was in the neck of the sac. Behind the gut was the testis, not larger than a small nut, and flabby. As it was evidently imperfectly developed and presumably functionally useless, and its situation exposed it to violence and would have made difficult the wearing a truss, it was removed. A sharp attack of peritonitis followed the operation. It was treated with opium internally, by mercurial inunction on the thighs, and the application of leeches, followed by fomentations to the belly. Coincidently with the appearance of slight soreness of the gums the abdominal symptoms began to abate; they rapidly disappeared, so that by April 6th he had recovered as regarded the hernia, and was about to be dismissed when an attack of pleurisy necessitated his transfer to a medical ward.

CASE 4. *Strangulated Inguinal Rupture; Reduction en masse; Herniotomy; Recovery.* (From notes taken by the dresser, Mr. G. Cree.)—An engineer, aged fifty-nine, who had been ruptured in both groins for twenty years, and had worn an inefficient truss, which sometimes let the ruptures to slip by it into the scrotum, was seized with vomiting after eating heartily of pork on the evening of Jan. 1st. For this a druggist gave him purgatives. As these did not act, and his disorder increased on the 4th, he was seen by a medical man, who, learning he was ruptured, examined his groins, and not finding any swelling there, regarded his symptoms as indicative of an internal obstruction, and prescribed belladonna and opium. On the following day he first detected a swelling in the right groin, and sent him into the hospital. The swelling was clearly a strangulated bubonocele. The patient's cheeks were pale and sunken; the surface of the body generally was cold. The pulse was small, weak, and rapid. He vomited frequently, and the matter thrown up had a fæcal appearance and smell. At this stage it was judged improper to repeat the taxis, which had already been tried by the former medical man, and herniotomy was done without delay. The sac was found to be very thick, and much congested. On opening it two ounces of bloody serum escaped, and the opening being enlarged several coils of small intestine protruded, the quantity being much greater than could have been contained in the inguinal canal. Most of this intestine had occupied a deeper part of the sac lying deeply in the belly between the fascia transversalis and the peritoneum. By drawing this down the neck of the sac, which constituted the constriction, was brought within reach and divided, after which the gut, very congested and thickened, but not gangrenous, was easily replaced in the peritoneal cavity. The wound was washed out with chloride of zinc solution (forty grains to one ounce of water), and a drainage-tube inserted. A slip of oiled silk, covered by a pad of boric lint, secured by a bandage, completed the dressing. He passed a copious loose stool the same evening. His recovery was uninterrupted, and on the 16th of the month, eleven days after the operation, he was able to return home. The anatomical circumstances disclosed at the operation leave no doubt that by an improper application of the taxis by the patient himself the upper part of the sac had been detached from its connexions in the inguinal canal, and thrust up more deeply in the belly, becoming bulged and punctured, but not torn. The straining attending the continued retching forced it again into the canal, and led to its detention here.

CASE 5. *Large Strangulated Scrotal Rupture; Operation one hour after the accident; Sac Unopened; Quick Recovery.* (From notes by the dresser, Mr. G. Cree.)—An enameller, aged forty, whilst at his furnace felt sick, as he thought, from the metallic fumes rising from his work, and beginning to vomit found his scrotum swell, and he was seized with severe pain in it and in the belly. When admitted into the hospital soon afterwards he was found to have an extremely tense scrotal rupture, of the size of a cocoa-nut. He was writhing with pain. His face and hands were cold, and bedewed with sweat. He had, he said, been ruptured for several years, and had worn a truss. As the rupture was irreducible by taxis, and its great tenseness and the severity of the symptoms indicated a very tight strangulation, it was subjected to operation one hour after the onset of the symptoms. After division of the margin of the external abdominal ring, and of some tight fibrous bands external to the neck of the sac, the contents were reduced without opening this latter. The bowels acted the same night. The wound healed by first intention.

KIDDERMINSTER INFIRMARY.

TWO CASES OF STRANGULATED HERNIA.

(Under the care of Mr. J. LIONEL STRETTON, honorary surgeon.)

CASE 1.—E. G——, aged thirty-three, female, unmarried, has been ruptured for two or three years and worn a truss, but latterly has left it off because it was uncomfortable. While straining at her work, carpet weaving, it came down, and she has not been able to return it. She was first seen on May 31st, the following day. She was lying in bed, her expression anxious; her bowels had not been open since the 29th. She had vomited several times on the 30th; the vomit was said to be of a yellow colour. There has been no sickness to-day. On examination there was found a small nodular swelling just below Poupart's ligament (right side) in the region of the saphenous opening. It is slightly red, very painful to the touch, resonant on percussion, no impulse on coughing. A slight attempt at taxis was made, and this failing she was ordered into the infirmary. On admission she was placed in a warm bath, and a further attempt at taxis made, but without success. After consultation she was placed under chloroform; another attempt at taxis was made, and this failing it was decided to operate. A vertical incision was made over the tumour and the sac carefully exposed; but as no constriction could be felt the sac was opened. The constriction was found at the femoral ring, which was very high up. The internal edge was nicked with a herniotome, and the gut easily returned. There was no omentum in the sac, and the gut was quite healthy though very tightly constricted. The wound was closed with silver sutures, a small piece of drainage-tube inserted at the lower end, and dressed with carbolic oil lint. To have one grain of opium pill at once, and half a grain every three hours. Iced-water to sip.

June 1st: Has had very little sleep. There has been no sickness. Slight pain in the region of the wound, but no oozing from the dressings. Tongue moist. Temperature 99·8°; pulse 116. To have one grain of opium every four hours. To have milk.—2nd: Has had a better night and feels more comfortable; passed flatus several times during the night; tongue moist. Temperature 101·4°; pulse 116. To have opium every six hours.—4th: Patient doing well; is menstruating; wound dressed, nearly healed, one stitch removed; opium stopped. Temperature 100°; tongue cleaning. To have beef-tea.—5th: Wound dressed again, remaining sutures and drainage-tube removed. Complains of discomfort; the abdomen somewhat distended. To have enema of milk and assafœtida.—7th: There has been no action of the bowels, still a good deal of distension. To have enema of gruel, castor oil, and assafœtida. Wound healed except aperture of drainage-tube. — 8th: Bowels open twice in the night; she is much more comfortable; tongue clean. To have fish.—12th: Patient practically well. To have mutton chops.—20th: Truss ordered, but owing to a sore just below the left anterior superior spine she was unable to wear it and had to remain in bed a week or so longer, at the end of which time she was discharged cured.

CASE 2.—J. G——, male, aged seventy, married; first seen on July 11th at 8.45 P.M. He was in bed complaining of great pain and sickness, and said, "I think I am ruptured." Upon inquiry he said that he was mowing with a scythe at 1 P.M. when he felt something give way, and he was seized with great pain in his right groin. He was vomiting continually, the vomited matter was curdy, not fæcal; his bowels had not been open for three or four days; since the accident he had wanted to stool but could not. Examination revealed a small swelling about the size of a walnut in the right groin, a little internal to the centre; it was so tender that no minute examination was made, but he was advised to go into the infirmary. At 10 P.M. he was seen at the infirmary, and after a consultation was placed under chloroform, and an attempt at reduction by taxis was made; this failing, the

operation was proceeded with. The usual incision was made and the sac carefully exposed. It was then found necessary to open the sac, which was accordingly done, when it was found to contain a small knuckle of healthy intestine and a larger piece of omentum, also healthy; the constriction, which was at the internal ring, was very light. Two little nicks were made in it, and the bowel and omentum easily returned. The wound was brought together with silver sutures, and dressed with carbolic oil lint. To have ice and water, a grain of opium in pill at once, and half a grain every four hours.—12th: Had a comfortable night, slept several hours. Much less pain; no sickness since operation. Temperature 100·4°; pulse 78; tongue dry. To have iced milk.—13th: Passed flatus several times yesterday and in the night; partakes freely of iced milk. Temperature 100°; pulse 70; tongue not so dy. To have a quarter of a grain of opium every four hours.—15th: Going on well. Tongue moist; temperature 99·6°; pulse 60. Dressed; nearly healed except lower part; upper sutures removed. Bowels acted this afternoon; motion natural. To have beef-tea; opium to be stopped.—20th: Is going on very well; temperature normal. Wound not quite healed at lower part. Bowels not open since the 16th. To have enema of castor oil and gruel. After enema bowels acted several times. To have mutton chop.—26th: Quite well. Tongue clean; bowels open; appetite good. Wound not quite healed.

Aug. 1st: Wound healed. Truss ordered.—8th: Discharged cured.

Remarks.—These two cases are instances of rapid recovery after operation for strangulated hernia without the so-called antiseptic (Lister) treatment. The success I attribute to two reasons:—(*a*) The early operation. (*b*) The absence of any rough manipulation. In neither case was there the slightest room for anxiety after the operation. In the first case the temperature never exceeded 101·8°, though we had the extra upset of menstruation on the fifth day; and in the second, a patient of advanced age, the temperature never exceeded 100·8°. That the operation *per se*, if all due precautions as to cleanliness be taken, is not one of extreme danger, I feel sure. And if cases were only seen early enough, and the operation at once resorted to before too vigorous attempts at taxis had been made, the mortality would, I think, be greatly reduced.

ASHBURTON AND BUCKFASTLEIGH COTTAGE HOSPITAL.

SEVERE HEAD INJURY, WITH TOTAL UNCONSCIOUSNESS FOR ELEVEN DAYS AND PARTIAL FOR FORTY-THREE DAYS; FRACTURE OF LEFT LEG; RECOVERY.

(Under the care of Dr. JAMES ADAMS.)

F. A——, a butcher's boy, aged twelve, was admitted on the evening of September 7th, 1882. He had been thrown from his horse and dragged a considerable distance with his left leg caught in the stirrup. He had sustained the following injuries:—Two lacerated scalp wounds over the left parietal region and a deep wound along the left eyebrow, all extending to the bone; division of the left upper eyelid; both eyes closed by the swelling all about them; nose and left cheek excoriated; both lips swollen; fracture of the left leg just above the ankle, the inner point of the upper fragment of the tibia projecting prominently beneath the skin, this point being subsequently pushed through, converting it into a compound fracture. About half way up the leg on the inner side venous blood was freely flowing from a small wound, into which a probe could be freely passed for some distance in a downward direction. Neither at first nor afterwards could any fracture of the skull be detected, although the symptoms and course of the case indicated serious brain lesion.

When admitted into the hospital the boy was unconscious and almost pulseless. The skin was pale and cold. With difficulty the boy was made to swallow a little brandy and water. He passed urine in the bed involuntarily in the night. The wounds were dressed with carbolised oil. The leg was put up with a back- and two side-splints. The ward was kept darkened. The head was shaved, and cold water applications kept up as far as possible. Milk diet and brandy were given, and three grains of calomel were administered at night for three nights.

Sept. 8th, 10 A.M.—Temperature 98°; pulse 150, soft and variable. Breathing shallow and irregular. Restless night. No urine voided during the day, and in the evening a catheter was passed and the bladder emptied. This was done twice a day for a fortnight. An enema with castor oil in it was given daily.—10th, 11 A.M.: Temperature 99°. Bad night, very restless, turning from side to side and displacing the leg splints. Scalp wounds doing well. Takes milk freely.—12th, 8.30. P.M.: Temperature 100·4° (this was his highest temperature). Restlessness continues by night and day; he is scarcely still for a minute. Had to put up the fracture again under a whiff of chloroform, the projecting point of the fractured tibia causing reddening of the skin and threatening to come through. Gave him ten minims of Battley's solution each night.—17th, 10.30 A.M.: Temperature 97°. Breathing shallow and very irregular. Pulse soft and very variable. Still restless and tossing about, and requiring constant supervision to prevent his falling out of bed. First spoke this evening, asking for drink. Ten drops of Battley's solution were given at night, and five in the morning.—23rd: Extreme restlessness continues. The tibia thrust through the skin by the constant twisting and moving of the leg, making the fracture compound. The splints had to be again adjusted under chloroform. Noisy, shouting frequently for nurse, drink, &c. Takes milk and broth well and sometimes an egg. The bowels act involuntarily and urine passed in bed involuntarily. Instead of opium, chloral hydrate and bromide of potassium were given.

October 7th.—Very restless and noisy, requiring very close attention to prevent his falling out of bed. Mind a little clearer. Kept repeating a word or sentence. Began to know when his bowels acted; also knew when he wanted to pass water. — 10th: More irritable and restless. Impossible to keep the splints in place. A wound as large as a florin above the inner ankle caused by the movements of the fractured tibia. Not the slightest union between the fragments. Appetite good. Chloral hydrate and sedative solution of opium were given every four hours. The opium was gradually increased till in one day, in the course of twenty-four hours, he took a drachm of Battley's solution and a drachm and a half of chloral hydrate without any ill effect. This combination seemed to quiet him more than anything else he had taken.—18th: Mind distinctly improved and restlessness less. Had a fit of weeping and was grieving bitterly about his friends and saying they were angels. The draught only required at night.—21st: Mind clear and right. No restlessness. Keeps the leg still. Put up fracture for the last time in fairly good position.

November 28th. — Fracture has united; starch bandage applied. The boy was allowed to get out of bed for the first time.

December 19th.—Discharged with brain power natural. Firm union of fracture with only three-quarters of an inch shortening. A small bit of bone from the projecting end of tibia necrosed and came away, and the wound after this healed kindly.

Remarks.—There were two points of special interest in this case—viz., the prolonged and acute cerebral symptoms followed by complete recovery, and the good result of the compound fracture notwithstanding its having undergone for six weeks such constant and severe disturbance before it was finally set.

ACADEMY OF MEDICINE IN IRELAND.

PATHOLOGICAL SECTION.

AT a meeting of the above Section, held on May 4th, the following living specimens were exhibited:—Dr. J. S. M'Ardle: Deformity of the Upper Extremity and Arrest of Development following Injury of the Median Nerve. Mr. Benson: Nyctalopic Conjunctivitis. Mr. Coppinger: a patient suffering from Hydatid Disease of the Femur.

The following specimens were exhibited by card:—Mr. Abraham: Ulcerations of the Intestines associated with Malignant Disease of the Cæcum, with microscopic mountings. Mr. Coppinger: Portions of Bone affected by Hydatid, removed from the Femur of the patient exhibited. Mr. Stoker: Thrombus of the Pulmonary Artery. Mr. Abraham: a single Kidney from the body of a man; the Left Kidney, with its vessels and ureter congenitally absent. Dr. L. Maturin: (1) Congenital Deformity of the Forearm and

Hand; (2) Aneurism of the Ascending Aorta. Mr. Corley: Impacted Alimentary Bolus.

Dr. E. H. BENNETT read a paper describing the characteristics of a Congenital Malformation of the Thorax, in which the anterior extremities of a single rib failed to reach its cartilage, and there existed, in consequence, a depression of the thoracic wall on one side, while the cartilages attached to the corresponding part of the opposite side were hypertrophied, and projected as tumours in front of the level of the sternum. Having referred to the description of this malformation given by Otto and Rokitansky, in which no mention is made of excessive development on the side opposite to the defect, Dr. Bennett showed a preparation which presented the characters mentioned in a most marked degree. He pointed out the importance of a knowledge of this malformation in relation to diagnosis of lesions of the costal cartilages, illustrating the point by the facts of the case from which he had obtained the specimen, and from two other clinical observations. In all three cases injuries had occurred, which suggested that the thorax had been crushed, and the diagnosis had been erroneous in one, that from which the specimen exhibited had been taken.

The SECRETARY (Dr. Bennett) read for Mr. J. DAVIDSON a paper on the Influence of Fracture on the Growth of Bone, in which the author recorded the results of his observations on the fracture of the long bones of the lower animals, chiefly fowls, in which the injury occurred during the active growth of bone. Comparison of the injured bones with their fellows showed that there existed a marked increase of size in all dimensions, the bones being heavier and longer on the fractured side.

Drs. FRASER, STOKER, CORLEY, M'SWINEY, BENNETT, and ABRAHAM discussed the foregoing paper, and expressed their sense of the exactness and care displayed by the author in his investigation.

Dr. COPPINGER read a paper on Hydatid Disease of the Femur, the patient and parts removed which established the diagnosis having been exhibited to the meeting already. He alluded to the infrequency of the occurrence of hydatid tumours in the human subject in Ireland, notwithstanding the known prevalence of the echinococcus disease in sheep. He observed that hydatid tumours, even in countries where the affection is comparatively common, seemed scarcely ever to invade the bones, and that no instance of the disease occurring in the bones had up to the present been recorded in this country. The patient had been under observation for three years, having been admitted to the Mater Misericordiæ Hospital with a spontaneous fracture of the upper third of the femur, due apparently to its invasion by the parasite. The disease was not diagnosed until Mr. Coppinger had made an attempt to excise the patient's hip-joint and discovered a large cavity in the dilated upper part of the femur containing hydatid cysts and loose pieces of bone studded over with small echinococcus vesicles; these exhibited the characteristic features of echinococcus cyst, &c. The complicated excision was abandoned, but the great trochanter was removed with a saw, and the cavity finally laid open and syringed out with chloride of lime solution. It was then ascertained that the shaft of the femur was firmly connected with its neck by means of the thin walls of the bony tumour, and it was hoped that the disease having been apparently removed the space would fill by granulation from below; it had since become much smaller; but the patient's condition was so unsatisfactory, even after nearly two years' treatment, that another operation would have to be performed for the purpose, if possible, of eradicating the disease. The limb was three inches shorter than its fellow. The man was obliged to have a crutch, being unable to rest his weight upon the limb; and the wound, which was still open, led through a narrow slit in the bone into a cavity in its centre, extending upwards into the neck as well as downwards into the shaft of the femur. Although this cavity was daily washed out with carbolic and boro-glyceride solution, and although all disease was apparently removed, collapsed cysts and shreds of membrane still escaped from it occasionally, proving that the peculiar disease caused by the presence of small exogenous cysts in the cancellous tissue of the bone had not yet been eradicated.

Mr. THORNLEY STOKER read notes of a case of Thrombosis of the Pulmonary Artery occurring in a boy subsequently to the removal of the thyroid body, and proving fatal. He exhibited the specimen.—Dr. BENNETT expressed his doubt as to the character of the thrombus, regarding it as a post-mortem production.—A discussion followed, in which Drs. Thomson, Corley, Kidd, and Abraham took part; and Mr. Stoker replied.

Dr. R. A. HAYES exhibited on a screen with the lantern photographs of the microscopic appearances of normal and diseased tissues, and explained the details of the process.

The Section adjourned.

MEDICAL SECTION.

At a meeting of this Section, held on May 18th, the following living specimens were exhibited:—Dr. J. C. Nixon: Case of Aortic Aneurism, with patency of aortic valves; anomalous physical signs. Mr. Coppinger: A Case of Paralysis following gunshot wound of the spinal cord.

The following specimen was exhibited by card:—Dr. J. Magee Finny: Nodose condition of the Hairs.

Dr. JOHN B. STORY read a paper recording three cases of Exophthalmic Goitre. The cases occurred in three women, two of them being unmarried. The following were the points of interest. Two of the patients were sisters, and the third exhibited the remarkable, and probably unique, complication of double optic neuritis, which, however, had subsided at the time the patient came under observation. In this patient the goitre was more marked on the left side, and the palpitations did not occur until five years after the goitre and exophthalmos; in the other two, the goitre and exophthalmos were more marked on the right side, and the palpitations were the earliest symptoms observed. Mr. Story called attention to the support these three cases gave to the theory propounded by Dr. William FitzGerald in the *Dublin Journal* of March and April, 1883.—The PRESIDENT said that although the disease was almost peculiar to females, he recollected three cases in which it occurred in males, the course being short, not quite eighteen months. On the other hand, he had seen it run on for eight or ten year in females. To him the disease appeared to be of neurotic origin.

Dr. WALTER SMITH related a case in which he had successfully removed a small Polypus from the right vocal cord of a lady aged thirty years, by Voltolini's sponge abrasion method. About Christmas, 1881, loss of singing voice came on. This was followed by hoarseness, which persisted for a year. In December, 1882, the patient consulted Dr. Smith, who recognised the existence of a pale-red pyramidal tumour attached to the edge and lower surface of the anterior third of the right vocal cord. After a short preliminary training, he succeeded in passing a moistened sponge about the size of a hazel nut beyond the growth, and then forcibly withdrawing the sponge through the rima, and bearing towards the right side, was fortunate enough to detach the little tumour, which came up adherent to the sponge, and was preserved. Immediately after the operation voice was restored, the hoarseness had disappeared, and the patient was able to sing. Six weeks subsequently she reported herself as perfectly clear in voice. The operation is a safe and painless one, and suited to a limited number of cases.—Dr. BEATTY remarked that the attachment of the tumour to the under part of the vocal cords favoured its removal by Voltolini's method. He had met another case in which, owing to its position anteriorly, this method failed.

Dr. HENRY KENNEDY read a paper on some of the forms of Dilatation of the Colon. The condition of the patients who had this affection was always that of impaired health. With this state, when the patients, who were usually thin, were examined lying on their backs, there was chronic tympany, though not necessarily to a great degree. Pressure on the abdomen did not cause pain. In conjunction with these symptoms the author stated that the main characteristics of the disease were the fæcal discharges, always dark, pasty, and unformed. He insisted particularly on the persistence of such discharges for weeks, months, and even years, during which periods the patients were constantly subject to attacks of diarrhœa, acute or chronic, and were liable even to perforation of the bowel and rapid death. He considered the prognosis should always be guarded. Treatment could much benefit those cases; but he doubted whether a complete cure could be effected.—Dr. GUNN asked if electricity had been tried, and quoted a case of atonic condition of the large bowel in which it seemed to have proved of benefit.—Dr. FINNY, too, bore testimony to the great advantages of galvanism applied by a rectal rheophore in cases of atony of the bowels.—Dr. WALTER SMITH said it should be remembered that there were great difficulties in applying any anatomical rules to the living subject, deduced from the position of parts of the dead body.—Dr. H. KENNEDY, in

reply, said he did not use electricity in any of his cases, nor had he made any post-mortem examination.

The PRESIDENT congratulated the Section on the success of its first session, which had now come to a close.

Reviews and Notices of Books.

Hospital Construction and Management. By F. J. MOUAT, M.D., F.R.C.S., and H. SAXON SNELL, F.R.I.B.A. Part I. London: J. & A. Churchill. 1883.

THIS is undoubtedly a very valuable work, and must constitute a book of reference in all matters concerning hospital construction. The authors are both of them thoroughly qualified to write on the subjects to which the volume is devoted. Dr. Mouat's knowledge of hospitals is well known to be extensive, and he may be trusted as one likely to give a scientific and unbiased opinion on points which have vexed sanitarians and architects. Mr. Snell's practical experience is great, and it is evident that he is anxious to bring his architectural knowledge into harmony with the requirements of modern sanitation. The authors unfortunately do not work together, and the only connexion between Dr. Mouat's portion of the book and Mr. Snell's portion is due to the bookbinder. It is to be hoped that in Part II. the authors will furnish us with a hospital plan as the outcome of their combined wisdom—a plan which shall be free from all the defects which seem inevitably to crop up, even in the most carefully considered modern hospitals.

Dr. Mouat's opinions do not seem to us to be very definite, but we gather that he is in favour of the one-storeyed pavilion, even in large towns; and since he gives the place of honour to the civil hospital at Berlin, the so-called Friedrichshain Hospital, we cannot do better than give some of the details of this building which are furnished by both the medical and architectural authors.

In this hospital accommodation is provided for 600 patients on twenty-three acres of land, so that the sick population is at the rate of twenty-six people to an acre, a density very much below that of the average population density of the metropolitan area, and only one-twelfth of the density of its most crowded parts. The theoretical area allowed for each bed is thus about 1700 feet, and if an area of this size were square, it would be about 41 feet in the side. The general shape of the ground is that of an irregular triangle. The buildings on this area are arranged in fourteen principal blocks, of which two are administrative and twelve are devoted to patients. The administrative block proper occupies about the centre of the base of the triangle, and opposite to it, at a distance of 800 feet, and near the apex of the triangle, is the building devoted to kitchen and laundry. The pavilions for the sick are arranged on either side of an imaginary line joining the two administrative blocks. These pavilions have their long axes running north and south, and while the four surgical pavilions are one storey in height, the remaining eight, for medical and infectious cases, rise one storey higher. The pavilions are 173 feet apart, except the pavilions for infectious cases, which are 134 feet apart. The pavilions are connected by an uncovered roadway 11 feet wide, and having a total length of 3600 feet. The hospital is therefore a village for the sick, consisting of fourteen houses, a chapel, mortuary, and a few subsidiary buildings for officers &c. It may give the reader some idea of the space occupied if we state that it is about equal to Lincoln's-inn-fields, and if the administrative block of this building stood where the College of Surgeons stands, the kitchen and laundry would be at the Inns of Court Hotel, while the infectious wards would touch the eastern boundary of the square, and the farthest surgical wards the western. The pavilions are all connected with the administrative buildings by electric bells, and a code of signals] has been arranged. Now, it is obvious that the separation of the pavilions must make administration difficult; but if distinct advantages flow from this arrangement it is, of course, justifiable. Emergencies are of everyday occurrence in hospitals, and emergencies are effectually met in proportion as distances are small and officials and supplies are within easy reach. From the kitchen to the furthest pavilions and back is a small journey at the Friedrichshain establishment, and this fact has, of course, its inconveniences. Whether these are counterbalanced by advantages is, we think, an open question. When we come to examine the wards themselves we find (taking the surgical wards) that these measure 97 ft. by 29 ft. 9 in. and are 19 ft. 6 in. in height. They each contain twenty-eight beds, so that each bed has 107 ft. of area and 2076 cubic feet of space. The large amount of cubic space is mainly due to the great height of the wards, and our best English authorities state that in reckoning height as available for cubic space 12 feet is the maximum. In these wards, then, 7 ft. 6 in. of height is mere surplusage, and if we deduct this amount of height we find that the theoretical space of 2076 becomes a real available cubic space of 1235 ft. Again, the value of the area of each bed very much depends upon its shape, and in this hospital we find that lineal wall space for each bed is under 7 feet, and that, owing to circumstances, each bed is less than 3 feet from one of the beds next it. If therefore the beds were dotted over the area occupied by the hospital, each patient would be some 40 feet from his neighbour, but in practice we find that they can easily shake hands from bed to bed and breathe into each other's faces. If it be allowable to place beds so close, why is it necessary to separate the pavilions to such a degree? If 3 feet of space within walls is considered enough, why is it necessary to separate the pavilions by a stretch of 176 feet in the open air? Simply, we believe, because architects do not sufficiently consider what open air means. Now, the average rate of movement of the wind in this country is between seven and eight miles an hour, or at the rate of about 40,000 feet per hour. While therefore, with the best possible means of ventilation, the air in a ward cannot be renewed more than about four times an hour, the air outside is being renewed some 40,000 times in an hour. Practically we never find that specific infections will cross from one side of a street to another; and why it is thought necessary to separate twenty-eight men with surgical troubles by an extravagant space from another twenty-eight, while the members of each batch are allowed almost to touch each other, we cannot say. The question is most important, and must be answered by those who are in favour of one-storeyed pavilions unless they would be considered as extravagant and crotchety. To build hospitals so that the air of one part of the building can drift to another part is, of course, perfectly unjustifiable. It is perfectly easy, however, to build a hospital of any number of storeys, so that every single room in it is supplied solely with fresh air from the outside of the building, and without the possibility of the patient's breathing air which has previously passed through any other ward or office. This, as far as we are aware, has not been done in any hospital hitherto constructed in this country. Even in some of the pavilion hospitals (so-called) closed corridors, staircases, and lifts serve for the conveyance of used air from one part to another, and where this is the case the pavilions are of little use. Even in the Friedrichshain Hospital we find that the medical and (strange to say) the infectious pavilions are of two storeys, and, as far as we can judge, every opportunity is given for germs (if such exist) to go up or down stairs from one floor to the other. We have not space enough to deal with the details of the wards of this new hospital. There does not appear to be much novelty in them, but the water-closets are in direct connexion with the wards.

We are very prone to blindly follow the Germans, and

when the Germans descend to imitating the French and English, we may be led thoughtlessly to imagine that final perfection has been reached. If it should turn out, which we do not believe, that one-storeyed pavilion hospitals are alone justifiable, it will be a bad look-out for the sick poor of London, where land costs from £12 000 to £20,000 an acre.

The Untoward Effects of Drugs. A Pharmacological and Clinical Manual By Dr. L. LEWIN, Docent of Materia Medica in the University of Berlin. Second Edition, Revised and Enlarged. Translated by J. J MULHERON, M D., Professor of Principles of Medicine, Materia Medica, and Therapeutics in the Michigan College of Medicine, Detroit, Michigan. Second Edition. Detroit: George S. Davis. 1883.

THIS is the only English edition, we are told, which has received the author's endorsement and approval. The object and scope of the work will be gathered from a short extract from the introduction. "Of far greater importance to the physician than the failure of the drug to work its normal action are the untoward effects which medicines have not infrequently been observed to induce, effects which are either substituted for the normal action or appear simultaneously with it. As an illustration of such untoward action may be noted the eruption following the administration of quinine, or in rare cases the undue effects of the same drug on the organs of sight, as seen in long-continued amaurosis. Cod-liver oil, ordinarily so bland, may give rise to a vesicular eruption, iodide of potassium may occasion a hypersecretion from the mucous membrane of the eyes and nose, and salicylic acid may, among other effects, cause diaphoresis and nervous disturbances." In Germany these unusual symptoms are known as "Nebenwirkungen," "physiologische Nebenwirkungen," or "Arzneisymptome," and are also spoken of as the "special" or "accidental," or "peculiar" action of the drug. French authors refer to them as "inconvénients" or "inconvénients thérapeutiques," as "accidents" or "cas d'accidents." In this country we speak of them simply as "unpleasant symptoms." We are told that the records of the appearance of abnormal effects of drugs are scattered through the most diverse parts of medical literature, and are either not at all, or but superficially, considered in the manuals or text-books on materia medica. For a long time the author has been engaged in making a collection of such facts, examining them critically, and adding to them from his own personal experience. We can only express our regret that his researches have proved so unproductive, for we are bound to confess, after a careful perusal of his work, that we have found very little with which we have not long been familiar. It may be, as he says, that the text-books on materia medica in Germany deal superficially with the subject to which he has devoted so much study, but we cannot say that such is the case in this country. Take belladonna, for example. We want to know with what frequency, or in what percentage of cases, belladonna or atropia produces a rash on the skin, and we turn to Dr. Lewin for information. All he has to say on the subject is contained in half a dozen lines. "Occasionally after the use of small medicinal doses there arises an affection of the skin. Thus, Lusanna (*L'Union Médicale*, 1854) reports a case in which the skin presented an intensely red colour, as if it had been exposed to the intense heat of the sun, in fifteen minutes after a small dose of atropia. This erythema lasted from half an hour to an hour, and appeared after each exhibition of the drug." Only one case, and that from a paper written a quarter of a century ago! Now, let us see what Phillips says on the subject. He discusses the matter fully, and quotes the observations of John Harley, Meuriot, Sinclair, Holthouse, Garrod, and many others. Speaking from his own experience, he says, "I am convinced that the scarlatina-like rash of belladonna-poisoning is far from being an accidental or rare occurrence. I believe it often occurs, and may occur in any case if the poisonous action of the drug be carried far enough. It is no doubt due to capillary congestion, and this congestion may equally invade the skin and the mucous membranes. The dryness of mucous membranes and the arrest of secretion from various glands are portions of the same effect." Here the comparison is certainly in favour of the English author, and it must be remembered that the "Vegetable Kingdom" is not a work devoted specially to a consideration of the untoward effects of drugs.

The information given under the head of Morphia is more complete, but still is very disappointing. A passing reference is made to the theory that the vomiting which sometimes follows the use of this drug is due to its partial transformation into apomorphia, but that is all. Our curiosity is excited and left unsatisfied. We are told that disagreeable effects have quite frequently been observed when opaque solutions, due to the presence of fungi, have been used for subcutaneous injection. A case is reported from Dumas, in which, after the injection of the opaque precipitate of a solution of morphia, a phlegmonous erysipelas of the abdominal walls was produced. At the site of the injection there was a hard nucleus, which soon developed into an intensely red swelling, which included almost the fourth part of the abdomen. A putrid liquid was evacuated by incision. There appeared inflammation and scaly desquamation of the subcutaneous areolar tissue, with violent symptoms. Under antiseptic treatment, and after several incisions had been made, the patient recovered. Dumas, it is added, recommends the boiling of the solution before each injection, but that is hardly practicable, and it would be better to suggest the use of compressed tablets of sulphate of morphia, which can be dissolved in a few drops of water, and injected at once.

Although we have criticised Dr. Lewin's work somewhat unfavourably, it must not be supposed that it is altogether a bad book. The references to French and German literature are copious, and will be found useful in hunting up scattered cases. We trust that in time a third edition will be called for, and that an attempt will be made to make it more complete. The book is well and clearly printed, and is a credit to the publisher.

The Analysis and Adulteration of Foods. By JAMES BELL, Ph.D., &c., Principal of the Somerset House Laboratory, Member of the Council of the Institute of Chemistry, &c. Part 2: Milk, Butter, Cheese, Cereal Foods, Prepared Starches, &c. London: Published for the Committee of Council on Education by Chapman and Hall. 1883.

THE second part of Dr. Bell's treatise is not less excellent than the first. Its greatest value lies, of course, in the account it gives us of the methods adopted and the results gained in the Government Laboratory, after years of experience and hard work, by a body of well-trained and able chemists, aided by every advantage available to science. But the labours of other chemists are by no means ignored. The methods of detecting and measuring adulterations have been greatly improved and extended since the passing of the Act. Many incompetent persons have been elected as public analysts, but also not a few skilful chemists; and the work of these chemists has been studied, and in many cases confirmed, in the Somerset House Laboratory. Dr. Bell's little book gives us, in fact, a statement as impartial as it is lucid of our present knowledge of food adulteration. Our only regret is that the book is not larger; but that, we presume, was impossible under the circumstances.

As everyone interested in the subject is sure to get the book, it is unnecessary to present a synopsis of it, but a few portions require notice as especially valuable.

In the chapter on Milk preference is given, rightly we

think, to direct weighing both of the fat and the solids not fat. A valuable series of milk analyses is presented in tables, with the conclusion, to which few will now object, that the standard of 9 per cent. of solids not fat in unwatered milk is too high to be safe. No exact standard can, indeed, be attained, and it is difficult to see how any certificates can accurately conform to the requirements of the Act. A method which appears satisfactory is given for the analysis of sour milk. It depends essentially on the exact neutralisation of the lactic acid by means of decinormal soda.

Under the head of Butter we find a good description of oleo-margarine, or "butterine." The methods for its detection, introduced by Hehner and Angel, Dupré, and Dr. Bell himself, are fully described. Dr. Bell makes no objection to the sale of butterine under its proper name, but only to the fraud of selling it as butter. He doubts whether it is equal to genuine butter as an article of food, but we are inclined to think that it is, at any rate, superior to the rancid stuff which too many of the poor are compelled to eat.

In regard to the vexed question of the injurious action of alum in bread, Dr. Bell holds that the presence of alum should be dealt with as a clear case of adulteration.

We shall look with interest for the next part of this valuable book, and must repeat our hope that Dr. Bell will be induced some day to give us a complete treatise on the subject. Few men are so competent as he for the task.

Transactions of the Epidemiological Society of London. New Series, Vol. I. London: David Bogue.

DURING the last few years, and doubtless in consequence of the increasing interest taken in the study of epidemiology, the members of the Epidemiological Society have materially increased in number. Many of the older reports are out of print, and it has been decided to commence a new series, of which the report for the session 1881–82 constitutes the first number. The volume opens with an address by the President, Dr. Buchanan, F.R.S., on Aids to Epidemiological Knowledge, the paper having for its main object to show how epidemiology is indebted to the various sciences for the advances which have been made in it. Examples are given to show the high value of mathematics as an aid to epidemiological inquiry; the indebtedness of the Society to physical science is specially referred to in connexion with the lessons that the physicist has taught about the very characters of infection itself; the value of microscopic research is specially indicated; and the use of pathology is brought out by reference to the labours of such men as Sanderson, Cohn, Klebs, and Pasteur. This paper is very aptly supplemented by one by Dr. G. C. Henderson, which traces the progress of Zymotic Micro-pathology from its infancy up to the present day.

Another branch of the work in which the Society is engaged is well indicated by papers on Filariæ and other Parasites in relation to Endemics and Epizootics, by Dr. Cobbold, F.R.S.; on Filaria Sanguinis Hominis in South Formosa, by Dr. Wykeham Myers; and on Filaria Sanguinis Hominis, Lymphocele, Lymphuria, and other associated disorders, by Dr. Prospero Sonsino of Pisa;—this series embodying in an admirable manner all the most recent information on this important subject. Indian epidemiology always forms an essential part of the work of the Society, and in the volume before us it is represented by a paper on Malaria by Sir Joseph Fayrer, and one dealing with the influence of Indian Hill Sanitaria on Scrofula, Tuberculosis, and Phthisis, by Dr. J. Ewart, Deputy Surgeon-General. The views which Dr. Airy has somewhat recently expressed, as to the probability that the infection of diphtheria is sometimes transported by the wind, are fully set forth by him, and numerous instances are given in which such diffusion is believed to have taken place. The administrative aspect of public health is dealt with in a paper by Dr. J. B. Russell on the Policy and Practice of Glasgow in the management of Epidemic Diseases, with results—a paper which indicates in a striking manner the immense progress which has been made in that city under the singularly able direction of Dr. Russell, in his capacity of medical officer of health. A very thoughtful paper by Dr. Arthur Ransome on the Form of the Epidemic Wave and some of its probable causes is also included in the volume, and the lessons it teaches are well illustrated by a series of well-drawn diagrams. The report is, indeed, one of the most interesting which the Society has issued; and, judging from the variety of subjects with which it deals, it would appear that the scope of the Society's usefulness is likely to be materially enlarged.

New Inventions.

A NEW METHOD OF SEWER VENTILATION

THE description and drawings of an ingenious contrivance for ventilating sewers and purifying sewer air have been forwarded to us. The idea seems so good that we regret we have not been able to see it practically applied, though it is stated that successful experiments have been made at Manchester. The apparatus is patented by Mr. T. S. Wilson F.S.I., and Mr. H. T. Johnson, and is called the Paten Hygienic Furnace. Profiting by the proximity of the gas mains to the sewers, the patentees have constructed a gas furnace to be inserted in the man-holes. The gas is introduced into a little chamber, where it is mixed with a due proportion of air and supplies some Bunsen burners. Immediately above the gas there are some fireclay plates, which soon become heated; while above them are iron divisions. The heat naturally draws the air up from the sewer below; it passes through the Bunsen burners backwards and forwards over the fireclay plates and iron divisions, till at last it finds its exit in the ventilation chamber or man-hole, and hence through the grate into the street. The furnace not only causes a strong current of air from the sewer, but, as it is capable of being heated at from 600° to 700° Fahr., it should destroy all the germ life that travels with the sewer gas. Experiments with sterilised infusions of meat have been made, and whereas ordinary air drawn from the street soon caused the infusions to become turbid with animalcula and fungoid life, no such effect was produced by the sewer air taken after it had passed through this furnace. There is, however, one objection to furnaces when employed to ventilate sewers. They certainly produce a very active suction, but the effect, however energetic, only extends to a short distance. We would therefore suggest that these ventilating furnaces should be as small and as inexpensive as possible, so that a large number of them might be used, and these at very short intervals.

ROYAL ALBERT ASYLUM, LANCASTER. — The annual meeting in connexion with this asylum was held on the 24th inst. Dr. Shuttleworth, the medical superintendent, in his report to the committee stated that during the past year ninety-nine patients had been admitted, fifty-three had been discharged, and twelve had died. The total present number was 516, showing a net increase of thirty-four. No epidemic disease had been present, and the death-rate for the year, computed upon the average number resident, had been 2·3 per cent.; or, calculated upon the aggregate number under care and training, 2·0 per cent. Of the twelve deaths which had occurred during the year, eight were attributed to phthisis and other affections of the lungs. Statistics as to the causes of idiocy are being tabulated, with a view of possibly throwing light upon the prevention of this affection.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 29, 1883.

ON Monday next a new medical year will begin. In most of our medical schools a mixed assemblage of listeners will be gathered together to hear the opening words of the session—many who have become grey in the performance of their laborious routine duties, others in the prime of life, rejoicing in the fulness of their strength and in the prospect of new medical worlds to enter on and possess, and some just qualified and eager for practice, still wondering as to the special field their destiny may determine for their future career. They will be found side by side with the tyro, new to medical phraseology and medical ways, and with the earnest student, anxious to know the why and wherefore of every piece of medical information, but scarcely appreciative of its relative value; and by all these, as well as by the lay public, will the advice given to the beginner by the lecturer of the day, and his estimate of the importance and future of our profession, be minutely criticised. He will have to welcome and to warn, to hold out the hand of good fellowship and to promise assistance, whilst he indicates the rocks and shoals which lie in the path of progress, and must be avoided by every aspirant for medical qualifications and honours. The highest ideal in medical science is so far beyond our every-day work that there need be no fear on his part lest the keynote be pitched too high. It is of especial importance in these days of commercial progress and success that the student of medicine should clearly understand at the commencement of his career that in the honourable pursuit of the medical sciences, and in the practice of the art which has these sciences for its basis, there is a satisfaction which is beyond gain or price, and which can only be equalled by the advisers for the maladies of the soul. The more solemn and high-toned the address to the younger students, the deeper will it sink into the minds of the older hearers, and the more cheering will it be to them in their wearisome round of daily labour, even though a stray cynic, in spite of his better self, may be heard to repeat the disappointing words of the great preacher, "Vanity of vanities, all is vanity." The period of medical history on which we have now entered is so important in its social, political, and scientific aspects that the choice of the lecturer whose judgments and opinions are no longer limited to a class, but go forth to the whole world and are spread everywhere by the lay press, must be a very grave and serious consideration. Increased severity in preliminary examinations; increased cost of medical education; the decline, indeed almost complete absence, of apprenticeship; the small gap between school-life and medical studentship;—all alter the old condition of things, and have brought about a change in the social standing and character of the medical student which, though hardly yet appreciated by those outside our profession, is very manifest to all within its ranks. A conservatism, necessarily inherent in all practical arts, has had to give way before the changing needs of a more elastic educational method. The disadvantages are clearly seen, but sufficient heed is rarely given to the many gains of the new system. The number of medical pupils who have had a thorough training in arts and science is now a marked factor in our estimate and hope of the progress of our profession. It is needless to insist on our relations to scientific work and scientific workers. We congratulate ourselves that medical men are in the van everywhere, no matter what may be the nature of the scientific problems that have to be worked out and determined. Science for its own sake is a most worthy object, and no one can tell in what way or how soon any of its most obscure or apparently practically useless results may be brought into the area of every day utility, and this is nowhere more marked than in the domain of medicine and surgery. Empiricism is slowly but surely dying out, and scientific therapy founded on a scientific pathology is occupying its seat. The political importance of our profession is increasing every year. Scarcely a public topic is mooted but medical opinion is eagerly looked for, even if it be not acted upon. The English nation is far in advance of all other countries in its estimate of the importance of sanitation and all that is implied by the word hygiene. Legislation is daily determined by a correct or erroneous opinion on this subject, and it is our duty to educate ourselves and the public to a right comprehension of the many problems of inestimable importance that are constantly being brought under public notice. In these matters medical men must have great influence, and they should be the pioneers in every measure destined for the good of the race. So far as the political position of the profession itself is concerned one thing only is necessary—viz., the speedy passing of a *bonâ-fide* "one-portal" Bill, so that all strictures levelled at ill-educated members may be deprived of their sting. We have anticipated a few of the thoughts that must arise in the minds of those to whom is deputed the honourable task of giving the introductories in the various schools, and of speaking for their brethren in the profession. We are sure that they will give no uncertain sound, but will maintain the distinguished prestige handed down to them by their predecessors. In advising the younger student they will carefully impress upon him, what must be the outcome of their own experience, that the human mind is so constituted that its improvement must be gradual, and it will be in vain to endeavour to substitute genius for industry and time.

Is it the duty of the State to subsidise Science? It is certainly the bounden duty of the Government not only to protect but also to ensure the welfare of the people it represents. In a vast heterogeneous community, made up of the most complicated arrangement of elements, the positive necessity for the cultivation of science demands recognition from even its humblest units. Indeed, the cry for science should be raised by the voice of every individual resident in such a state of society. The mere aggregation of individuals, introducing as it does numerous fresh systems of co-ordination, whilst it entails undoubted benefit, is yet fraught with possible dangers not only to the *bien être*, but to the very existence of the social organism. Danger threatens the life of this complex organism from two chief quarters—war and disease. The

State maintains and cultivates military and naval forces for protection against the former, but its armoury against the latter more dreadful foe is as yet insufficient. So much for the dire necessities of the case. But we have not merely to do with the protection of the life of the body. The care of the intellect of the nation is also a part of the business of the State. It is not necessary in these days to discuss the claims of science to proper recognition as an agency in the cultivation of the mind. We have already inferred that science, or the knowledge of causes, is a necessity for the mere existence of aggregated life. It is only by science that such a mode of life is rendered possible. By enlarging the bounds of the one the other becomes not a simple possibility, but a more and more stable reality. Life indeed becomes not mere living, but enjoyable and happy existence.

In his recent address at the British Association, Professor RAY LANKESTER advocated the endowment of research, especially in biology, urging that in the past it has produced discoveries of the greatest service to humanity, and that it was retarded by the want of means to prosecute it. He also propounded a scheme for the establishment of institutes such as exist in Germany, claiming to use the funds (now represented by property worth three millions) which were left 250 years ago by Sir THOMAS GRESHAM for the establishment of laboratories, but put to other uses a century ago by the City Corporation and the Mercers' Company.

There can be no doubt that many Englishmen who take an interest in the progress of science are apt to suppose that, in some way which they have never clearly understood, the pursuit of scientific truth is not only its own reward, but also a sufficient source of the necessities of life. We can quite believe that while they are interested by the remarkable discoveries of scientific men, they may also be astonished whenever a proposal is mentioned to assign salaries to a few such persons, sufficient to enable them to live decently while devoting their time and strength to investigation. Professor LANKESTER considers that it is in part owing to the fact that the real state of the case is not known that no attempt is made to raise scientific research, and especially biological research, from the condition of destitution and neglect under which it suffers—a condition which is far below that of these same interests in France and Germany, and even in Holland, Belgium, Italy, and Russia, and is discreditable to England in proportion as she is richer than other States. Professor LANKESTER is so able and courageous an advocate of the cause of State-subsidised science, that we cannot do better than quote him thus largely:—"We know that knowledge is languishing, that able men are drawn off from scientific researches into other careers, that important discoveries are approached and their final grasp relinquished, that great men depart and leave no disciples or successors, simply for want of that which is largely given in other countries, of that which is most abundant in this country, and is so lavishly expended on armies and navies, on the development of commercial resources, on a hundred injurious or meaningless charities—viz., money." He also reminded his hearers that KOCH'S brilliant discovery was the immediate result of investigations carried on at the public expense in the Laboratory of Public Health specially erected by the German Imperial Government. If Professor LANKESTER intended to wound the pride of his English hearers and readers, we think he has successfully accomplished his undertaking. To have repeatedly before one the reiterated account of the performances of the Germans in this department; to know that a carefully prepared arithmetical table has been drawn up to contrast our own small contributions with the quadrupled greatness of the German Imperial Government in these matters; to feel that each succeeding sentence will tell us more of our miserable shortcomings—is to be aware of cognitions calculated to depress us, at all events temporarily,—though it is to be hoped that such transient loss may finally stimulate us to work for better things.

Although Professor LANKESTER is essentially a zoologist, it must be remembered that his plea is not confined to the ground of his own study. Biology comprises also pathology, physiology, anatomy, and botany. The popular notion that biology and zoology mean pretty much the same thing, is apt to lead people wrong in this connexion. Many well-meaning persons might fail to see why Government should support institutions for biology in their incorrect understanding of the term. We ought ever to remember that each biological science is capable of throwing light on the other. The continuity which a deeper knowledge shows to exist between these five sisters is a further contribution from quite recent investigations. Physiology and pathology are at least co-extensive with zoology and botany, and anatomy is chiefly separated for its special application to the human species.

So, then, the claim for State aid to science is one which is coetaneous with the welfare of all living things. In England there is a total of thirty-eight subsidised posts (taking assistantships, professorships, and curatorships all together), with its 25,000,000 inhabitants, as against 300 in Germany with 45,000,000 inhabitants. In proportion to its population (leaving aside the consideration of its greater wealth), England has only about one-fourth of the provision for the advancement of biological research which exists in Germany. This state of things must be remedied, and where ought we to look for the remedy but to the Government?

THE history of epizootic aphtha, or what is more familiarly known as foot-and-mouth disease, dates as far back as two centuries and a half, but it is only within the last forty-four years that the disorder has devastated the herds and flocks of this country. The pathology of the affection is too well known to call for more than a passing comment in these columns. The disease is an acute specific fever, being infectious and highly contagious. It has a period of incubation varying from one to three or four days, and it is further characterised by a vesicular eruption which generally appears in the mouth and about the coronets of the hoofs. It confers very little protection against subsequent attacks. Since the notably fatal visitation in 1869 several outbreaks have been recorded. The present visitation has spread rapidly and widely, and has naturally caused considerable alarm in the agricultural world. Apart from the serious pecuniary losses of those immediately concerned in the breeding and rearing of cattle, the disease has special claims upon our notice on account of its bearing upon the public health.

Dr. BALFOUR and Mr. H. WATSON have shown beyond doubt that foot-and-mouth disease is communicable to the

human subject by the milk obtained from cows affected with the fever; and Mr. J. B. HISLOP has established the fact that the malady can be transmitted to man by direct inoculation with the lymph from the vesicles, and with the discharges from the subsequently ulcerated surfaces. One case of accidental inoculation of the hand has been brought to our notice, but in it there appears to have been little or no constitutional disturbance. The regulations relating to the responsibility of persons in charge of diseased animals are so stringent as to cause no great uneasiness in the professional mind, save in one direction—that of the consumption of the milk of cows stricken with the disease. It is a punishable offence to conceal the knowledge of infection, and also to expose for sale the flesh of animals slaughtered to save their lives and the pockets of those who have a pecuniary interest at stake.

Besides the more common sites selected by the virus for its local manifestations, the udders of milch cows are not seldom so seriously involved as to arrest the natural secretion, or furnish such an amount of puro-sanguinolent matter as to render the milk obviously unfit for domestic purposes. But where the type of the disease is mild, the mammary gland in not a few cases escapes, and in some it is only partially crippled, still yielding sufficient milk to prove remunerative to the vendor. We assert without hesitation that milk obtained from such a source must be condemned as unfit for human food; for, apart from its serving as the vehicle of communication of the disease from animal to man, it cannot be denied that it must be greatly deteriorated in quality, and more unstable than usual in composition. And when we consider that milk often forms the staple article of diet of invalids and children of tender age the danger attending its use is something more than imaginary.

There are two difficulties that lie in the way of putting a stop altogether to the pernicious practice above referred to. In the first place, it may not be easy to prove that a given sample is so vitiated as to fail to pass the analysis of a medical officer of health; and, in the second, there is nothing to prevent an unscrupulous dairyman from mixing such a sample with another obtained from healthy cows; and thus the difficulty of detection may be raised to an impossibility. Unfortunately statistics on the subject are meagre and imperfect, but this perhaps is due rather to the want of careful investigation than to any intrinsic difficulty in obtaining the necessary facts. It is stated on good authority that "milk supplied to other animals should, if possible, be boiled, by which its pernicious properties will be destroyed." No doubt this may be true in so far as it bears upon the destruction of the specific elements of the disease; but boiling will not give to the secretion the physical and chemical properties which it should but does not possess. Still, where the evil cannot with certainty be avoided, it should be minimised. The advice given with regard to the lower animals is applicable with greater force where the life and well-being of the human subject are concerned.

We trust that we may do some good by drawing attention to a possibly potent cause of impairment of health, and that our remarks may stimulate practitioners—those in country districts in particular—to look after the milk-supply of the families under their care. Individual inspection and supervision will prove of greater value than a host of legal restrictions, which, although excellent in their aim, are, from their general and imperfect application, necessarily deficient in remedial action.

A MEMORANDUM on the Hospital Accommodation for Infectious Diseases in Glasgow has just been issued by Dr. J. B. RUSSELL, medical officer of health for that city, and its perusal will well repay anyone who is interested in the isolation of the infectious sick. Many important principles relating to this question are discussed in detail, the experience of Glasgow and of other places being cited with regard to each of them. In our issue of the 15th inst. we urged upon Liverpool the desirability of considering how far a single hospital would be adapted to the requirements of that populous borough, and we may now suggest to the authorities of the great Lancashire city that they would do well to examine Dr. RUSSELL'S report both as to this and other matters. Glasgow, with a somewhat smaller population than Liverpool, practically decided, as far back as November, 1870, that it would be undesirable to do with less than two hospitals, and a large portion of the present report is taken up with an argument to the effect that this decision should be adhered to. Whether the question be considered in connexion with the requirements of the various epidemic or infectious diseases, with the number of beds that should be provided per acre, with the limit to the size of a hospital from an administrative point of view, with the proximity of the hospital to the population for whose use it is intended, or with mere matters of convenience, such as that of having more than one hospital for concurrent epidemics, the result is the same—namely, that in the case of such a city as Glasgow, a distribution of the accommodation to be provided for infectious cases has a distinct advantage over concentration of the sick on one site. We are unable to take up all the various points raised by Dr. RUSSELL, but there is one which is of considerable importance, in making isolation provision for all large cities. Miss NIGHTINGALE, in her "Notes on Hospitals," after having expressed her opinion in favour of the pavilion principle, goes on to say that the only limit to the size of the hospital will be an administrative one. This, we fear, can no longer be regarded as correct with reference to small-pox, an exception which is fully recognised by Dr. RUSSELL, who is willing to comply with the limitations laid down by the Royal Hospital Commission as to the aggregation of such patients. But apart from this, Dr. RUSSELL discusses the question, What is the administrative limit? and in doing so he draws a distinct line between general hospitals and hospitals for infectious diseases, holding that the experience available as to the former affords no criterion for determination as to the size of the latter. He proceeds to enforce his opinion that large hospitals are undesirable by reference to the establishments provided by the Metropolitan Asylums Board, and he specially quotes the opinion of Dr. J. H. BRIDGES, which is to the effect that the extreme limit at which economy can be made to consist with adequate control and supervision, does not admit of a larger fever hospital than would contain 300 beds. Dr. THORNE THORNE, in his recent Report on the Use and Influence of Hospitals for Infectious Diseases, has laid down the rule that the number of beds in an

infectious hospital should not exceed 20 per acre. This rule appears to meet with Dr. RUSSELL'S approval, and it is evident that, if it be assented to, smaller hospitals than have heretofore been provided in large towns must be adopted; or if a large number of beds be placed on any one extended site it will be essential for administrative purposes that they should form more than one hospital. To ensure administrative success in an infectious hospital, it is necessary that there should be maintained "a rigid monocracy," and directly the medical dictator is compelled to delegate some of the duties of supervision, which he should himself perform, to other persons, from that moment it becomes evident that the proper administrative limit has been exceeded. And, further, economy is by no means favoured when such a limit of magnitude is passed as prevents adequate supervision on the part of the officer whose duty it is to control that portion of the administration. The point at which superintendents or chiefs of departments have either to be doubled, or to hand over part of their duties to subordinates, is the point at which further extension should stop.

THE controversy as to the relations of the sisterhood to the Council of St. John's House and to the authorities of King's College and Charing-cross Hospitals has been revived during the past week. As we pointed out on the 11th ult., the facts of the case are exceedingly simple. Personal difficulties, in no way affecting the system of nursing, had arisen between the sister-in-charge and the managers of King's College Hospital, and it was pointed out to the Council of St. John's House that unless this lady resigned her position, and another sister took her place, the good understanding which had always existed between the two bodies would be imperilled. The Council of St. John's House, by a large majority, accepted this view of the situation, whereupon all the ladies, both at King's College and at Charing-cross Hospitals, resigned their places, gave up their work at both hospitals, and endeavoured to persuade the nurses to follow their example. The nursing arrangements, however, were only partially interfered with, so that the hospitals were able to continue their work during the emergency. There could have been no intention on the part of the authorities of King's College Hospital to alter the system of nursing, for they were prepared at any time to accept another sister-in-charge in the place of the sister-matron. The objections were personal ones, and had nothing to do with the system. The sisters at Charing-cross Hospital had no disagreement with the Committee or with the medical officers; but because the Council of St. John's House came to the conclusion that attention must be paid to the representations of the authorities of King's College Hospital all the sisters made common cause, and struck against the rule of their Council. The executive of St. John's House at once took active means to secure the co-operation and support of other ladies who had been trained as nurses—for St. John's House must not be considered the only institution in which trained ladies are found—and, with a new staff, are carrying on the nursing at both hospitals. The results of the strike are now quite clear: the nursing at the hospitals has been temporarily impaired, but is quickly becoming as efficient as it ever was; Mr. FEW and two other gentlemen, who were strenuous supporters of the conduct of the ladies, have retired from the Council of St. John's House; whilst the sisters have lost the care and charge of the largest institutions with which they have been connected. Indeed, it seems doubtful whether they will be able to continue in existence as a sisterhood, for the greater part of their work and mission has been taken up by others. This is much to be regretted, but we have no doubt that even if the organisation as a sisterhood ceases to exist, the members individually will find plenty of new work elsewhere. The whole incident illustrates most clearly the disadvantage of hospital managers transferring the charge of the nursing department to an outside body. If they had kept to themselves the authority over their own nurses, sisters, and sister-matron, no such difficulty could have arisen at either King's College or Charing-cross Hospital; and there is no truth whatever in the statement which is so freely made, that under such a *régime* "the standard would be lowered." The individual ladies, and not the system, make the standard.

Annotations.

"Ne quid nimis."

HONOUR TO WHOM HONOUR IS DUE.

WE have received an extract from the ninth volume of the *Electrician*, which seems to show that the honour of having invented the electric telegraph really belongs to Edward Davy, a member of the medical profession, who, at the advanced age of seventy-seven, is now living in one of the Australian colonies. Davy's original paper appeared in the *Mechanics' Magazine* for 1838. An original manuscript, dated 1836, entitled "Outline of a new plan of Telegraphic Communication, by which intelligence may be conveyed with precision to unlimited distances in an instant of time, independent of fog or darkness," has lately been discovered among Davy's papers by his nephew, Dr. Henry Davy, of Exeter; and this, as well as others, have been placed in the hands of Mr. J. J. Fahie, who is the author of the paper in the *Electrician*. The first idea was to use static electricity for transmitting the signals; but this was soon abandoned, and the electro-magnetic properties of the voltaic current was the form of electricity upon which Davy ultimately relied, and the signals were made by the deflections of the needle of a galvanometer. His proposal was to use as many wires as there were letters in the alphabet, but these he subsequently reduced to half the number by making a deflection to the right convey one signal and to the left another. When Cooke and Wheatstone applied for their first patent in 1837, Davy entered an opposition, lodging with the Solicitor-General of the time a full description of his own apparatus; and in November and December of the same year a working model of Davy's apparatus was shown in a room adjoining Exeter Hall. An examination of Mr. Fahie's paper leaves no doubt on the mind that Davy had a very clear notion of the electric telegraph, but it would occupy too much of our space to go into the technicalities and details. It seems that Edward Davy was born in 1806, studied at St. Bartholomew's, and became M.R.C.S. and M.S.A. in 1928. He soon gave up medical practice, and became a practical chemist, having a place of business in the Strand; and his ingenuity is evidenced by a "blow-pipe," a "mercurial trough," and a "diamond cement," which bear his name. It is probable that he would have succeeded with his invention just as Cooke and Wheatstone did, had he not lacked three necessary

things: (1) backers with money, who believed in him and his inventions; (2) good men of business to advise him; and (3) "push," without which inventive genius is of no avail. Just as he had perfected his ideas, he left England and became one of the assayers to the Melbourne Mint. Had he remained at home to enforce his ideas with the necessary pestilent importunity, he might have reaped the reward of his genius. Davy had genius, but lacked another quality, needful but less lovely, and thus the story of his invention is the story, as Mr. Fahie says, of a "magnificent failure."

KAIRIN, THE NEW ANTIPYRETIC.

SINCE Dr. Filehne, a few months ago, introduced to notice the remarkable antipyretic action of kairin—an artificial alkaloid described as being the hydrochlorate of oxy-chinolin-ethyl,—the drug has been given by others whose experience confirms that of the introducer. Thus Dr. Sassetzki (*St. Petersburger Med. Wochenschrift*, Sept. 1st) states as his experience of its use in a case of typhus that kairin is a valuable antipyretic, doses of half a gramme reducing high fever to a normal temperature, which can be kept down by repeating the doses. The pulse falls together with the temperature, and the excretion of nitrogenous and phosphatic substances is lessened. The urine assumes a green colour, which disappears very rapidly on ceasing the administration. It is curious that the fall of temperature in this case was not accompanied by sweating. No ill effects resulted from the drug. Another case is recorded by Dr. Knipping of Neuwied (*Berliner Klinische Wochenschrift*, Sept. 10th), which may be briefly given here. A young woman, about twenty years of age, suffered from puerperal pyrexia for about nine days. On the fourteenth day after her confinement she was allowed to rise and take a bath. Next day she complained of pain in the left thigh, and symptoms of parametritis appeared, which was not controlled by the application of ice, leeching, &c., periphlebitis of the left leg also occurred with much irregular pyrexia, and the temperature reached nearly 105° F. On the twenty-fourth day there occurred periphlebitis of the right leg, and the case was further complicated by intestinal catarrh, bronchitis, and some dulness at the apex of the right lung. The morning temperature was 104°; evening, 105·4°, with very slight remissions; pulse 120 to 130, small and irregular. Quinine had been given in full doses without any influence, and the weakness of the patient precluded a resort to cold baths, so that on the thirty-fourth day, when the temperature reached 106·4°, and the heart was failing markedly, resort was had to kairin. It was given in doses of 0·5 gramme, in gelatine capsules, every hour. After the first dose the temperature fell to 102·2°, with profuse sweating; after the fifth, to 100·2°. The pulse did not correspondingly fall at first, remaining at 100. A reduction of the dose to 0·25 gramme was followed by a rise in the temperature to 105·4°, with return of the bad symptoms, so that 0·5 gramme was again given hourly for four hours, when the temperature had fallen to 101·2°. For the next four hours 0·25 gramme was given, with relapse of fever to 102·2° and 103°, again reduced to 100° by resort to the larger dose. The administration was continued for a week, and by the forty-first day the condition was much improved—temperature about 100·4°; and the intestinal and pulmonary symptoms had passed away. On now omitting the drug there was a slight rise in temperature, but this was easily controlled, and the case did well. In the seven days she had taken 220 doses of kairin without any toxic effects, beyond slight pricking sensations on the nose and forehead after the first dose. The urine became of a deep dark-green colour, free from albumen and casts, the normal colour returning if the drug was discontinued for twelve hours. The writer describes the sweating as being most marked, subsiding as soon as the kairin ceased to act and the temperature rose. He believes the drug in this case to have been the means of saving the patient's life, and insists upon the dose being repeated hourly if the antipyretic action is to be maintained.

THE PARKES MUSEUM.

THE Sanitary Institute of Great Britain is about to move to the premises of the Parkes Museum in Margaret-street. Mr. White Wallis, the secretary of the Sanitary Institute, has become the secretary of the Parkes Museum. Although brought together under the same roof, and owning the same individual as Secretary, the two institutions will remain distinct. We have also been informed by Dr. Dawson Williams, the honorary secretary of the Museum, that the veteran Mr. Edwin Chadwick, C.B., has presented a large number of books to its library, and that the collection of books there has also been enlarged by the addition of the library of the Sanitary Institute, which will be available for reference by members of the Parkes Museum.

On September 20th a deputation from the Parkes Museum waited upon the Court of Common Council at Guildhall to present a memorial asking the Council to aid the Museum by a contribution of money to its funds. The deputation consisted of Dr. Poore, Vice-Chairman; Mr. Charles H. Parkes, Mr. E. C. Robins, Dr. Steele, Dr. Williams, Mr. Mark H. Judge, the late secretary; and Mr. White Wallis. The memorial pointed out that the Museum was established at University College in 1876, where its collection was exhibited, free of cost, until last year, when the Museum was removed to premises in Margaret-street, and opened by the President, H.R.H. the Duke of Albany, in May last. As evidence of the economical management of the institution, it was stated that only £595 had been paid in salaries during the seven years ending June 30th last. On the motion of Mr. Alderman De Keyser, the memorial was referred to the Finance Committee for consideration and report.

DEATH IN THE POT.

ON the 24th of July last a public luncheon was held at St. Ives in connexion with the annual show of the Huntingdonshire Agricultural Society. At this luncheon upwards of two hundred persons sat down. The viands were served cold, and consisted of salmon, lamb, pies, &c. No question exists as to the fish and meats having been all first class. After the luncheon several persons began to feel most unaccountably ill. A splitting headache, and in some cases vomiting, were the symptoms. Generally, however, an effort seems to have been made to throw off the sudden sickness; but by the time many of the partakers of the luncheon had reached home, to the headache and vomiting was added purging. A peculiar but universal symptom was a metallic taste in the mouth, and in at least one instance the lips were very much swollen. There seems also to have been a general craving for something acid to drink, so nauseous and clammy was this taste in the mouth. At first no one thought of connecting these symptoms with the repast; but after a few days the increased number of the sick, in all directions and of both sexes, began to attract attention; and when it became known, as it did in the following week, that one of the judges at the show, and also one who partook of the luncheon, had died of English cholera, notes were compared, and it was found that from seventy to eighty cases of sickness, all with the same symptoms, could be clearly traced to this agricultural show luncheon. Careful inquiry elicited the apparent fact that no person was ill who did not partake of the salmon. It also appears that some who did eat salmon were not at all affected, but the proportion these cases bear to the total numbers who were

ill is very slight. It also appears that the salmon was not all cooked in precisely the same degree, for some certainly passed the salmon on owing to its undercooked appearance, while others were helped twice on account of its palatableness. Naturally the clue which would be followed by any inquirer would be that presented by the salmon; and the symptoms being so unmistakably those of metallic poisoning, the condition of the pot or pots in which the fish was cooked appears likely to solve the mystery. Unfortunately these points can only be cleared up by the caterer and his servants, but there appears strong probability that the fish was not all cooked at the same time and in the same vessel. Had the facts which have come to light since the death of one of the judges been known at the time of his illness and death, doubtless a searching inquiry would have been made by a coroner. Of course the question will arise as to whether or no all these cases may have been of a typhoid or zymotic character. St. Ives is, as to its sanitary arrangements, old-fashioned. Its water is derived from shallow wells, and in close proximity to the luncheon tent runs a ditch, which had been disinfected, but which receives the washings of the Great Eastern cattle trucks. But in no known case was the illness communicated to any other members of the family. There seems to be very little doubt that one and all the cases were due to copper poisoning, and that, somehow or other, the salmon was the medium through which the poisonous effects were conveyed to the consumers. The after-history of the salmon which remained promises to tell the same tale as that consumed at the show. This is being inquired into. Had all the cases occurred in one place, doubtless an official inquiry would have been held, but being scattered over a breadth of some forty miles, although happening at the same time, the knowledge of the coincidence was not simultaneously acquired, nor was suspicion directed to a common or special cause for many days after the attacks.

VARIATIONS OF THE URINARY CHLORIDES.

No one will deny that a more frequent examination of the constituents of the urine might lead to the acquisition of fresh knowledge. Even in our public clinical institutions the systematic estimation of the most important urinary constituent is not regularly carried out. A complete clinical account of the changes in the urine which attend the active stages of the rachitic process would probably be attended with important additions to medical science. Indeed, the same may be said of most acute diseases. In ordinary medical attainments perhaps the only piece of information with regard to the chlorides of the urine consists in the knowledge of the fact that there is a remarkable diminution of this ingredient in acute pneumonia. M. Burot has done well to draw attention to this unploughed field of clinical medicine. He has devised a simple apparatus for the purpose of estimating the chlorides. A small flask is furnished at its inferior extremity with an ampulla capable of holding just one cubic centimetre of urine. A pipette is obtained, gauged in tenths of a cubic centimetre. Another little flask containing a solution of argentic nitrate is used from which the pipette may suck up some of its contents by means of a ball of caoutchouc. A cubic centimetre of urine is first treated with a solution of potassic chromate. The solution of nitrate of silver of known strength is then dropped in by means of the pipette The whole of the chlorides in the urine have been obtained as soon as the *café au lait* precipitate of chromate of silver appears. M. Burot found that the normal amount of chlorides in the urine was eleven grammes for every litre, consisting of ten grammes of chloride of sodium and one of chloride of calcium. In tuberculosis it was estimated that seventeen to eighteen grammes of chlorides per litre were discharged. But a diminution of the chlorides is of greater import, especially in acute affections. In pneumonia, when the temperature is much raised the fall in chlorides is considerable. This diminution was not noted in broncho-pneumonia. But in the pneumonia of typhoid fever at the onset of death the chlorides completely vanished.

REVIVAL OF FEVER IN LIVERPOOL.

FOR some years past we have been hearing less of the prevalence of fever in Liverpool; but we regret to see by the report of a discussion by the Health Committee in the *Liverpool Daily Post* of the 21st inst., that in certain streets which in Dr. Trench's time had an evil repute for fostering fever there has been a revival of the disease. Thus, while in 1880 there were 1399 cases in dirty houses, in 1882 the number was nearly double, being 2662. In one instance eleven persons were found in a cellar in a state of abject destitution. The body of a child, dead of "fever," was found covered with vermin, "fly-blown," and merely hidden from view by means of pieces of paper, the wretched inmates of the cellar-dwelling having nothing in the way of a shirt or sheet with which to cover it. Some of the medical members of the committee entered a very proper warning against the misconstruction of general statements. Still, we must say that there is a case made out for urgent inquiry and accurate returns. The very nature of the cases must be ascertained. "Fever" is still used in a very vague way to mean two or three distinct diseases. We want to know whether the disease is typhus or typhoid, or whether there are cases of both; whether drainage is at fault, as Dr. Bligh suggests; or whether the cases are of the old typhus character, suggestive of misery, starvation, drink, and their usual allies. The case is not one to be settled by quotations, however shocking, from old reports, but by actual and carefully ascertained facts of the present moment. We cannot suppress our opinion that for the collection of such facts a discreet system of notification by householders should be instituted without delay. Even the lowest classes in Liverpool will be all the better for knowing that their homes and their diseases are matters of public interest, and that public opinion is bent on their not being always the victims of deadly conditions of domestication.

ALLEGED DEATH FROM VACCINATION.

THE inquest which has just been held at Deptford on the body of a child who was alleged to have died from the results of vaccination, but who was found after a post-mortem examination to have died from pneumonia in no way connected with the vaccination, shows the urgent need for those who are interested in protecting the public from small-pox to take some step which will ensure the presence of counsel at these investigations. Of late a number of inquests have been held on children dying from any cause after, but not associated with, vaccination. The parents of the deceased children are invariably represented by the counsel of the Anti-Vaccination Society, who is allowed free licence to attack both vaccination and vaccinator, and to endeavour to persuade a coroner's jury to return a verdict condemnatory of both. Fortunately, in the case to which we refer there was abundant evidence to show that the child's death had nothing to do with its vaccination, and the jury returned a verdict to this effect, but they added a rider condemnatory of the vaccinator, for which no grounds whatever existed, and which certainly would not have been possible but for the misrepresentations of the counsel who appeared for the parents. This rider, we are informed, the jury have sought opportunity to revise, but without avail. It cannot be held to be incumbent on the profession to undertake the duty we

propose. Vaccination is performed for the benefit of the public, and it is to them we must look if steps are to be taken to protect vaccination from the prejudice which results from the adverse verdict of a coroner's jury. This is a matter that deserves the attention of the Local Government Board, who, as the controlling authority over the vaccination of the country, should be properly represented by counsel in these cases.

ELEPHANTIASIS ARABUM.

M. CORNIL has recently had the opportunity of examining the tissues and organs of a case of elephantiasis Arabum, complicated with albuminuria. The spleen was enlarged and advanced in amyloid degeneration; the kidneys also presented amyloid and fatty changes, whilst the liver was simply fatty. The skin of the affected limbs is described as being irregularly mammillated, warty, and ulcerated. The epidermis was greatly thickened, particularly the granular and horny layers. The papillæ were enlarged in all directions, composed of a loose connective tissue, containing flat and round cells; the capillaries were dilated, thin-walled, and full of blood. The dermis was enormously thickened, and its dense tissue appeared as if infiltrated with a clear fluid, which could not be pressed out. The bundles of fibrous tissue ran mainly in two directions—some parallel to the surface, and others traversing these perpendicularly, and accompanying bloodvessels. The lymphatics were dilated into irregular spaces or rounded channels. The ducts of the sweat glands were much elongated, owing to the increased thickness of the cutis. Ulceration had occurred in several parts, destroying the papillary body; and micrococci, probably connected with the septic process, were found in vessels in the vicinity of the ulcers. The sciatic nerve and its branches and the anterior crural were about one-third larger than normal; the neurilemma and the surrounding connective tissue were notably thickened, and in some of the fibres the axis cylinders were broken up or wanting. The lymphatic glands were in a state of chronic inflammation. There was also some inflammation of the coats of the femoral artery and vein.

COPPER AND CHOLERA.

THE precise set of conditions necessary for the life and welfare of micro-organisms seems to be capable of very fine adjustment. Under some circumstances the development of bacteria may, so to speak, just go on, but with the introduction of another apparently trivial factor this development may become luxuriant. Or that plenteous growth may be determined by the removal of some injurious circumstance, seemingly of no great moment. It is exceedingly probable that the protoplasm of human organisms is just as sensitive to apparently small influences, though the effects may possibly be less obvious. In a paper by M. Bochefontaine, recently presented to the Académie de Médecine, treating of experiments on the antiseptic action of copper, the conclusion is arrived at that whatever action sulphate of copper may have on the contagious element of cholera, it has none on "*vibrioniens ou germes microbiques.*" M. Béchamp said that from numerous experiments made in 1867 he had shown that the salts of copper and iron were able to retard the evolution of bacteria in certain cases; but that under other conditions, especially of the atmosphere, this evolution was not prevented. The statements which M. Béchamp has made are quite intelligible, but as much cannot be said of the conclusions of M. Bochefontaine, as reported in *L'Union Médicale*. It is high time that our terminology in regard to micro-organisms were settled. The statement that sulphate of copper has no action on "*vibrioniens ou germes microbiques,*" is certainly capable of a variety of interpretations.

CONTINUITY OF STRUCTURE IN VEGETABLE ORGANISMS.

THE continuity of the protoplasm through the walls of vegetable cells was the subject of a series of papers at the meeting of the British Association at Southport. Mr. Walter Gardiner has embraced in his investigations fifty species of plants, and he found that the cells were placed in communication with one another by means of delicate threads passing through the walls of the cells. For some time evidence has been tending to show the unity of the vegetable individual and the working together of its various specialised organs. In every single property of protoplasm and in the exhibition of every phenomenon the plant and the animal have been shown to be possessed of a common life. The statement that in animal life there is a differentiation of the protoplasm, while in the plant there is only one of cell wall, can now no longer be held. These new facts give us a clearer insight into such phenomena as the downward movement of a sensitive leaf upon stimulation of the action of a tendril towards its support and so forth. Dr. Carpenter expressed the very deep interest which ought to be felt in these communications, because they went to the very fundamental conception of life. We have been coming to perceive, he said, that there are a great many forms of animal and vegetable life which never arrive at the dignity of cell form. This continuity of protoplasm was really just drawing the lower forms of the two kingdoms into closer approximation.

EXERCISE v. BANTINGISM.

OBESITY is a disease—a gradual, yet a true perversion of a normal state, and therefore a disease—which from its continual irksomeness, apart from any worse symptoms, renders those who suffer from it particularly ready to accept any means of relief, reasonable or unreasonable, if only it will ease them of their burden. It would be superfluous to review the various systems professedly based on scientific principles, but really founded too often on fallacious reasoning, which have claimed to achieve this result. When one considers the slow development of this condition, its selection of certain individuals in preference to others who consume the same ingredients of diet, and the other circumstances of those affected, it is clear that there is some inherent state of being or habit of life which, more than mere quality of food, conduces to excessive fat formation. For its safe and effectual treatment, provided that the case be not of so long-standing as to be beyond all treatment, this state must first be understood and regulated. It is well known that whatever interferes with oxidation, with due metamorphosis of digested food within the tissues, is apt to lead to its storage in the form of fat. This is true not only of fat itself, but also, though in a much less degree, of substances—as albumen—far removed from it in the scale of chemical change. Such interference arises, on the one hand, from the ingestion of more food than can possibly undergo assimilation, especially if it be largely composed of carbohydrates; on the other, from insufficient demand for formative material on the part of the tissue elements themselves, and this demand is proportionate to their loss by exertion. It is therefore necessary for health that consumption should be limited as nearly as may be to what is necessary for sustenance, and that discharge of waste and tissue demand should be at the same time encouraged by moderate bodily exercise. But, moreover, the limitation of food must be in its quantity rather than its kind. A certain mixed diet is requisite for healthy growth, and neither fatty, farinaceous, nor albuminoid material can be omitted from it in any considerable proportion without detriment to the general nutrition. If the stout man who desires to be thin will restrict himself to a lean meat diet,

taking but a trifling amount of the other more carbonaceous substances after the Banting method, he will indeed lose bulk, but the restriction will not arrest his fat-forming propensity, which still survives, though on reduced fare, and will return to him as soon as he resumes his former mode of living. Moreover, his Bantingism must either underfeed the non-fatty tissues in respect of their most important constituent, carbon, or to avoid this must so overload every organ, but especially the kidneys, with surplus albuminoid excreta as to cause their overwork and degeneration at no distant date. The danger, though still real, is less to men of active habits, but such the obese commonly are not. By this method we seek to avoid one trouble, with partial success, only to fall into another, perhaps worse. While therefore we are ready to admit that stout persons should be content with a less rich diet than the spare-bodied, we are careful to preserve its essentially mixed character, to limit its consumption in quantity, and to rely for disposal of the products of digestion mainly on regular and methodical physical exertion. There should be no difficulty about this latter, seeing that it may be taken in different forms suited to various ages and constitutional types. Walking, riding, rowing, and for the younger and more robust, athletic exercises of more energetic kinds, are among the most valuable, from their exercising more or less the whole of the muscular energies. Then there are many kinds of amateur work which offer the same advantages. By all such means free play is afforded for tissue changes, for excretion of waste, and for regular and rapid blood circulation. In short, it is necessary for him who would enjoy the ease of an unencumbered person to remember in practice that the laws of supply and demand have a relation to one another as close and as inseparable in the human frame as in the commercial world.

CHLOROPHYLL IN ANIMALS.

SOME biologists have considered that chlorophyll in animals was due to the presence of minute parasitic algæ; but this view, entertained by German physiologists, is opposed to various considerations. Chlorophyll has been found in a diffused condition throughout all the tissues, and not merely in the form of little globules, which might be considered as independent organisms. Mr. McMunn read a paper at the British Association in which he defined chlorophyll as that colouring matter or mixture of colouring matters which can be extracted from green leaves by means of alcohol and ether. He had proved that this green colouring matter was present in the intestines of invertebrate animals, and the conclusion at which he arrived was that all the characteristic appearances of vegetable chlorophyll are present in animals, and that such pigments were synthetically built up by and in the bodies of animals.

THE SUICIDE OF AN ANTI-VACCINATIONIST.

WHEN we indicated last week that anti-vaccinationists would be enlightened by nothing else than an experience of the disastrous potency of small-pox in its unmitigated forms, we did not expect such a speedy illustration of our words. Mr. Wm. Escott, of Rotherhithe, had some months ago an outbreak of small-pox in his house and lost his wife and three children. It was alleged that this was a consequence of his disapproval of vaccination. Along with contempt of vaccination there generally exists a sort of disregard for the risk of small-pox; and it was added that many caught the disease through Mr. Escott's carelessness, and that one young man died through lending him a coat for the funerals. To crown this calamity a discussion of the whole matter took place at the Rotherhithe Vestry, at which the Rev. Mr. Beck, the chairman, seems to have made some very natural observations. The result of all was that Mr. Escott committed suicide. Here, then, are five deaths and many small-pox cases due to the absurd notions of an anti-vaccinationist. Let others of his class take warning by his fate, and judge from it what will be their feeling when a favourite child, or possibly three, lie dead in consequence of conceited and absurd objections to the most beneficent discovery of medical science.

THE MUTABILITY OF BACTERIA.

THE question whether the same germs under different conditions give rise to various diseases has been raised, but not settled. Dr. Carpenter, at the meeting of the British Association, treated the subject from a point of view of natural history. He referred to the facility which the lower forms of life possess of adapting themselves to changed conditions of existence. He believes that the same germs may under altered circumstances produce various diseases, and these opinions he supported by various arguments. The decrease of the virulence of the small-pox which ravaged Europe in the fifteenth century he attributed to the cultivation of the mildest cases which occurred. A severe attack of any particular disease may so affect the system that a disease arises which cannot be recognised as related to that from which it proceeded. Under favourable conditions an ordinary intermittent fever may develop into a virulent form, which is highly contagious. There is, in his opinion, very strong ground for the belief that even the innocent hay bacillus may undergo such an alteration in its type as to become the germ of severe disease.

TEMPERANCE AND LONGEVITY.

MR. H. B. ROBINSON, at the British Association, has been urging, from the experience of life assurance offices, the value of abstinence from strong drinks as a means of prolonging human life and reducing the premiums for life insurance. He said:—

"There were several mutual life assurance societies which kept quite separate the statistics of the lives of the general section and of those persons who abstained from strong drinks. At present many difficulties presented themselves in the inquiry, which would no doubt be eliminated in future years. The most valuable facts were furnished by the United Kingdom Temperance and General Provident Institution, showing that in seventeen years the claims in the temperance section were only a little over 70 per cent. of the expectancy, while in the general section they were but slightly below the expectancy. The experience of the Whittington Life Assurance Company was not yet enough to form any exact opinion upon, but the company said that 'teetotalism seems to be favourable to longevity.' The Sceptre Life Association stated that during the eighteen years of their history ended in 1882 they had 116 deaths in their temperance section against 270 expected deaths, and in 1883 the same disproportion prevailed, as they had had 51 deaths, and only seven of them were the lives of abstainers, whereas to be equal with non-abstainers there should have been 19. In the Emperor Life Assurance office lives in the temperance branch were assured at a less rate than moderate drinkers. In some accidental offices the assumed superior lives of abstainers was recognised by a charge of 20 per cent. less to teetotalers than to moderate drinkers."

Such statements are not new, but they are very interesting. They will have to be based on a longer and larger experience before any very positive conclusions can be drawn from them; but, taken in connexion with the higher premiums exacted of publicans and their early deaths, they show temperance to great advantage. As one of the speakers in the discussion observed, it is difficult to know how the offices guarantee the

abstinence of those whom they insure. There is a considerable temptation to fraud in offering a premium of 20 per cent. less to teetotalers. We do not in any way wish to imply doubt as to the advantages of the strictest temperance. We are constantly expressing our conviction that many people who regard themselves as moderate drinkers are unconsciously laying the foundation of disease. But we want strict facts on both sides, believing that there is a great amount of drinking due to ignorance, and that there are numbers of persons to be reached by intelligent and moderate statements who cannot be converted by sensational ones.

ANIMAL ELECTRICITY.

DR. MCKENDRICK, so well known for his physiological researches, delivered an able and interesting lecture on Galvani and Animal Electricity before the Southport meeting of the British Association on Monday last. In summing up, the lecturer said that all these electrical changes were really expressions of the vital changes occurring in living tissues under the action of stimuli. It was no part of the functions of nerves, muscles, or of the retina of the eye to produce electrical currents under the action of their relative stimuli; but such currents indicated chemical changes in the organs or tissues. For example, the contraction of a muscle is a movement following or consequent upon many chemical changes, among the results of which were the production of heat and differences of electrical potential. Thus, there was no special production of electricity except in the cases of electrical fishes, and possibly of some other animals. In most animals, including man, the production of currents was an incidental phenomenon, indicating chemical operations and nothing more. Besides, the currents so produced were feeble and evanescent and bore no relation to the general well being. Consequently, all attempts to influence the living body by magnets had no rational basis. It need hardly be said that the so-called phenomena of animal magnetism are of an entirely different kind from those discussed. These are of a subjective character, dependent on peculiar states of the nervous system, having nothing whatever to do with electricity or magnetism; but still in a sense they are phenomena as real as those of physical science. Their subjective character, however, renders them specially difficult of investigation, and consequently they are more liable to fall into the hands of the charlatan.

EARLY SYMPTOMS OF GENERAL PARALYSIS OF THE INSANE.

IN a paper read at the annual meeting of the Massachusetts Medical Society, Dr. W. B. Goldsmith of Danvers analysed the initial symptoms recorded in the histories of 100 cases of general paralysis of the insane, in which he points out the exceptional occurrence at an early stage of the disease of any well-marked characteristics; that physical and mental symptoms usually appear nearly synchronously, the most frequent and characteristic being defective articulation. He also concludes that changes in the pupils and disorders of the gait are less frequent, and have less value in diagnosis, than is usually ascribed to them. He found the patellar tendon reflex to be markedly supra-normal in nearly 25 per cent. of general paralytics, the presence of this symptom being of much value in corroborating diagnosis, its absence having, however, no significance. Hallucination, or impaired function of the special senses, is very rare as an early symptom; nor had he noticed in any case the diminution in the sense of smell, thought by Voisin to be very frequent in the early stages. In twenty of his cases, the first "motor" symptom consisted in convulsions or loss of consciousness; and he urges the importance of careful inquiry on this head. Among mental symptoms, the marked exhilaration with delusions of wealth and greatness, usually considered to be characteristic, was present early in less than one-fourth of the cases; the more frequent change is simple failure of mental capacity and activity, and mental depression.

INTERNATIONAL MEDICAL CONGRESS, 1884.

PREPARATIONS for the eighth session of the International Medical Congress, to be held in Copenhagen from Aug. 10th to 16th, are being actively carried on. A local committee has been formed, as follows: President, Dr. Panum; Secretary-General, Professor Lange; Secretaries, Dr. Bloch, Dr. Salomonsen, and Surgeon-Gen. Joh. Moller, together with the presidents of the committees of the various sections—viz., Anatomy, Prof. Chievitz; Physiology, Prof. Panum; General Pathology and Pathological Anatomy, Prof. Reisz; Medicine, Dr. Trier; Surgery, Prof. Holmes; Hygiene and State Medicine, Dr. Hornemann; Military Surgery and Medicine, Director-General Salomon; Mental and Nervous Diseases, Prof. Steenberg; Obstetric Medicine and Surgery, and Gynæcology, Profs. Stadfeldt and Howitz; Diseases of Children, Prof. Hirschsprung; Ophthalmology, Prof. Hanson Grut; Diseases of the Skin and Syphilis, Prof. Haslund; Diseases of the Ear and Throat, Dr. Meyer. The programme for some of the sections has already been decided upon, although at this early date the arrangements are all more or less provisional; and invitations are being issued for suggestions upon each programme, to be sent to the President of the Organising Committee of the section before November 1st. Amongst the subjects proposed for debate in the pathological section are tuberculosis, coagulation—necrosis, pathogenic micro-organisms, chronic nephritis, etiology of malignant tumours, anæmia, &c.

DEATH FROM COLD IN MAMMALS.

THE behaviour of protoplasm under the influence of different degrees of temperature is still insufficiently known. We are familiar with the general facts that excessive heat or cold brings about death, and that fever is attended with increased tissue changes; and in some measure we understand the kind of way in which this happens; but that is all. MM. Richet and Rondeau have studied the influence of cold on some mammals. They have adopted a method by which the temperature of the animals has been gradually lowered. Dogs resist cold so well that no experiments were made on them. Rabbits were chiefly employed in these investigations. These animals were shaved and surrounded with flexible pewter tubes, through which cold water was made to circulate. When the temperature of the body was lowered to 25°C. respiration began to be ineffectual. The rhythm was not modified; but the amplitude of the inspirations was chiefly diminished. The functions of the nervous system were much abated when the temperature fell to 17°C.; they were not, however, abolished. Reflex movements were obtained, even when the temperature sank to 15° or 14°C.; and the observers believe that the excitability of the nervous system disappeared not directly on account of the cold, but probably from arrest of the circulation. Spontaneous movements disappear before the reflex acts. The reflex from the cornea went before those from the lower limbs. At 16°C. the reflexes were remarkably slow and like those in animals with a cold circulation. Sensibility to pain was not abolished even at the temperature of 16°C. Cold gradually slowed the cardiac action. The form of the contraction at 17° C. was like that of the heart of the tortoise. Systole commenced at the auricles, and by a slow vermicular movement passed on to the ventricles. Even although death had been apparent for half an hour, the animal could be restored to life; so that vitality can be recalled half an

hour after the cessation of respiration and circulation. When the temperature was 19° C., it took more than ten minutes to asphyxiate the rabbit by blocking the trachea. We may conclude from this that tissue metabolism is correspondingly slow. The same animal was suffocated in four minutes at a temperature of 32° C. MM. Richet and Rondeau commented on the similarity between the vital processes of hibernating animals and those of rabbits thus experimented upon, in which a condition, so to speak, of artificial hibernation may be induced.

THE LATE DR. LOUIS THUILLIER.

OUR Paris correspondent writes:—Although the subject of this notice, whose death was recorded in THE LANCET of last week, was not a medical man, his name was so intimately connected with the profession by reason of his biological researches that the following sketch may not be unacceptable to your readers. Louis Thuillier was born at Amiens on May 4th, 1856, where he also received his general education. He was admitted to the Ecole Normale in 1877, and left it in 1880 with the diploma of Agrégé in Physics. Soon after this he was appointed assistant in the Chemico-physiological laboratory of M. Pasteur, where he proved himself a zealous worker, and with whose name that of Thuillier will be for ever associated for his co-operation in their researches on "charbon," on the "rouget" of pigs, and on the typhoid fever of horses. Last year M. Thuillier gave a public conference at the Trocadero, where, before a crowded audience, he reviewed the discoveries of his master, and pointed out the important services rendered by the illustrious chemico-biologist to science and industry, and thus to humanity in general. As soon as intelligence was received in Paris of the premature death of Dr. Thuillier, M. Jules Ferry, in his own name as Minister of Public Instruction, and in the name of the Government as Prime Minister, forwarded a telegram of condolence to M. Pasteur for transmission to the family of his deceased disciple and assistant. His untimely death is deeply lamented, and a tablet has been ordered by the Minister of Public Instruction to be placed on the walls of the Ecole Normale to perpetuate his memory.

DIPHTHERIA AT MILL-HILL.

IT is not long since we gave an account of an outbreak of diphtheria at Hendon, and at the time we referred to some prevalence of the disease at Mill-hill, which is within the urban district of Hendon, the prevalence in question having apparently nothing in common with the outbreak in Hendon proper. It now appears, however, that since December last diphtheria has from time to time reappeared at Mill-hill, and its frequent recurrence is, in the minds of some, associated with the practice adopted by the East London Hospital for Children of sending convalescents to board in what has hitherto been regarded as one of the most healthily situated spots in the north of the metropolis. So far as is known, only one convalescent from diphtheria has been boarded out at Mill-hill, but it is also stated that at least one came who had suffered from "croup." This latter disease is, except when distinctly of the spasmodic type, so allied to diphtheria that for etiological purposes the two must for the present be regarded as alike, and if "croup" cases have before been sent to Mill-hill they may account for some of the disease; the more so as it is becoming more and more evident that the diphtheritic infection is in some cases retained about apparent convalescents for a much longer period than has hitherto been believed possible. But it is doubtful whether this is the sole cause of the repeated outbreaks in Mill-hill. In the adjoining Hendon ward the disease was associated with the use of a certain milk-supply; and the infection is as likely to have been retained about the Hendon, and the former Mill-hill, convalescents as about the persons of children from the hospital referred to. Mr. Power inquired into the Hendon outbreak for the Local Government Board, and the sanitary authority are again asking for similar help. So far their request has not been complied with.

OPIUM SMOKING.

FROM a paragraph in the *Evening Standard* we learn that the official report of Dr. Ayres, colonial surgeon, upon opium smoking has created a sensation at Hong Kong. It would appear that some pains have been taken to measure the influence of the habit of opium smoking. The conclusions arrived at are to the effect that an opium smoker does not lose weight when deprived of his stimulant; that he does not suffer from the deprivation in such a degree as does a tobacco smoker; that he cannot recognise any difference between opium which contains 25 per cent. of morphia, and opium from which all morphia has been extracted. It is Dr. Ayres' opinion that the practice of opium smoking "has no effect whatever" in a medical sense. He has smoked twelve pipes at a time, and has watched Europeans consume as much. He declares that there was no alteration in the pulse, temperature, or cerebral faculties. That the habit is mischievous for those who cannot afford it, Dr. Ayres emphatically states; but he is not discussing that point. The opium smoker is a complete puzzle to him. Eating the drug has a very different effect, but Dr. Ayres believes that in burning all its noxious properties are destroyed. In the absence of the data from which these inferences are drawn, we refrain from criticising the statements. On similar occasions we have stated our convictions (*vide* THE LANCET, vol. i., p. 233, 1882; and p. 245 of the current volume).

RELIGION AND SCIENCE.

IN connexion with the recent meeting of the British Association many sermons were preached by leading members of the Church and the various Nonconformist bodies, several of whom are themselves eminent scientists. The Bishops of Liverpool and Carlisle dwelt specially on the relations of religion and science. The Bishop of Carlisle is stated to have said: "If we could see perfectly perhaps the knowledge of God and the knowledge of nature were one." It must be so if God is the God of nature. The Creator must be known in and by His works. It seems strange that any should fear the advancement and extension of knowledge as a possible antagonism to the Truth. All truth must be harmonious. The only contradictions are "the oppositions of science *falsely so-called*."

ANTISEPTIC FRIGIDITY OF WOUNDS.

THE healing of open wounds is said to take place more slowly under the influence of antiseptic dressings. It would seem, according to M. Gosselin, that the antiseptic substances exert an antiphlogistic action on open wounds. In preference to speaking of such an effect as antiphlogistic, M. Gosselin would use a new term—frigidity. By frigidity, then, we are to understand the slowness of reparation and cicatrisation of an open wound. In 1879 and 1880 MM. Gosselin and Bergeron showed that antiseptic agents impede the alteration of the blood about wounds, not only by purifying the atmosphere of the germs of putrefaction, but by rendering the extravasated blood less liable to undergo putrefaction. It has been since determined that this change in the blood also takes place within the capillaries, and consists, in fact, in a coagulation of the albuminoid materials. Weak solutions of carbolic acid, alcohol pure and diluted, and camphorated brandy all give rise to coagulation of the

blood in the capillaries, as well as outside the vessels. The circulation is thereby arrested, and this occurs without any vascular contraction. The stronger the antiseptic solution the more rapidly was the circulation arrested. Moreover, Gosselin believes that this limited amount of arrest in the circulation is not accompanied by any gangrene of the tissues.

THE NEW SCHOOL OF MEDICINE, PARIS.

THE new School of Medicine, which is being built in Paris, consists of two separate edifices, divided by the street called the Ecole de Médecine, the first of which, belonging to the Faculty of Medicine, is to be used for the general purposes of the Faculty, and includes the library, general offices, and museum of normal anatomy; while the second, belonging to the Practical School, will contain the laboratories of the professors and all the services relating to anatomy, such as the dissecting-room, lecture-room, collections, &c., as well as a museum of pathological anatomy. The Dupuytren Museum, which was placed in what was once the refectory of the monks, to whom the monastery, which had been converted into a school of medicine, belonged, is to be rearranged, and will have a façade upon the new street, when it is completed. The total length of the frontage of the new schools upon the principal street is upwards of 400 feet, and they will cost, when finished, about £280,000.

OVER-PRESSURE IN ELEMENTARY SCHOOLS.

GREAT as are the advantages of free elementary education, it is under the compulsory system apt to suffer from certain disadvantages which a little forethought and discretion on the part of officials connected with its administration may often remedy. Complaints are heard from time to time of the tendency to unduly increase the number of subjects of instruction. Teachers complain of the pressure on their own behalf and that of the children. We do not dispute that there may be subjects outside the circle of the three R's about which young children may learn something with benefit to themselves, but the application of all such instruction should be tempered by consideration for the age, the circumstances, not always favourable, in regard to nutrition and the hygienic surroundings of the recipients. The brain of a child of ten or twelve, for example, even under the best conditions, is not usually equal to much in the way of elementary mathematics, of languages other than the every-day tongue, or even of that favourite school study, physiology. In regard to all such subjects there should be no pressure. We do not know that ill effects in this connexion are to be measured by the statistics of brain disease. A child's health may suffer for want of timely play and fresh air without any signs of mental alienation. There is many a strumous child in Board Schools. Can anyone say whether tuberculosis or meningitis has increased under educational pressure?

LUNACY IN SCOTLAND.

THE General Board of Commissioners in Lunacy for Scotland has issued its twenty-fifth annual report. It appears that since January 1st, 1858, when the Board entered on its functions, the number of "officially known" lunatics has nearly doubled, the increase being from 5823 to 10,510. We are glad to see the Commissioners recognise that this is not an increase in the number of *actual* lunatics, but of *officially known* lunatics. The total number known to the Board on January 1st, 1882, was 10,095. On January 1st, 1883, the total was 10,244. These figures are for the patients in asylums, public or private. The Commissioners are careful to point out that "the statistics of pauper lunacy cannot be taken as an indication of the amount of insanity in the country." This is a very obvious statement; but obvious as it is, the force of the argument is too seldom fully appreciated. Every now and again we hear loud lamentations, because *more* lunatics are "officially known" and the demand for asylum accommodation seems to be increasing. The more active and the better our cognizance of insanity, the more will that trouble seem to increase until the point is reached at which all occurring cases are known, should such a public calamity ever befall the country.

ONLY NINETY-NINE YEARS OLD!

THERE is something very fine in the correction our careful contemporary, *The Times*, has to make in its report that preparations were being made for the celebration of the 100th birthday of Sir Moses Montefiore. It had to announce that Sir Moses on his next anniversary will be only ninety-nine! The difference may not seem very great to our younger readers; but it is, indeed, much. The correction reminds us of one which is reported to have been made somewhat promptly by Sir John Franklin when one of the Lords of the Admiralty ventured to suggest that he was too old for what proved his ill-fated enterprise—that, in fact, he was fifty. "Oh, no, my lord, I am only forty-nine!" was the quick rejoinder. Though not so rare a feat as some would have us believe, it undoubtedly still is a feat to accomplish at ninety-nine another year of life. But, from all accounts, Sir Moses Montefiore is as likely to achieve this feat as most people of his age, and we heartily wish him success. Physiologically such a success is gratifying, especially when, as in Sir Moses's case, it involves the prolongation not of mere life, but of so many of the qualities which make life estimable at any age.

CHOLERA CHEMICALLY CONSIDERED.

THE greater the ignorance which prevails on any particular subject the more numerous are the existing views on that question. An acquaintance with such a variety of opinions possesses a certain kind of interest. M. Ramon de Luna has given expression to his views on cholera at a recent meeting of the Académie des Sciences. He believes that the cause of cholera is always to be found in the atmosphere; that it exerts its action exclusively through the respiratory passages; that it is especially during the passive condition of the individual, particularly during sleep, that its incubation takes place; that the microbe or ferment acts chiefly on the blood-corpuscles, preventing proper oxidation, and so leading to gradual suffocation; that the only remedy which was ascertained to do any good was the inhalation of the fumes of nitrous acid mixed with air; and that the same agent is of prophylactic value against cholera. These conclusions are given as the result of practical successful experience.

MUD SALAD MARKET FOR SALE.

IT appears that the above is in the market. Will no public authority buy it? The Duke of Bedford has offered to sell the property to the Corporation of the City of London. As Covent Garden is not within the City boundaries it would be an extremely spirited thing, and constitute an excellent bid for an extension of its authority to the whole metropolis, if the Civic Corporation would become purchasers of this much vexed and vexatious estate. With such resources as the City of London can always command, and so much public spirit as has been shown by the Corporation on many occasions—mainly at the instigation of one of its permanent officials, to whose services we have more than once effectively called attention in these columns,—there may yet be a way found of getting rid of a nuisance by turning what is now a curse into a blessing for the whole metropolis.

THE PROTECTION OF ASYLUMS AGAINST FIRE.

IT is pleasant to know that while the Commissioners in Lunacy sleep—so heavily that they cannot even rouse themselves to issue a circular or "recommendation"—the committees and proprietors of asylums are bestirring themselves. A considerable number of public and private establishments are being fitted with fire-escapes. This is very wise. Self-acting alarm thermometers, which signal any special rise of temperature by ringing a bell, are also, we understand, in demand. Without offering any opinion as to which is the best of the many appliances procurable, and which are all strongly recommended—by their makers,—it is certain that effective measures of precaution should at once be taken. The conditions of an asylum fire are so much worse than those of an ordinary house-burning that special provisions are imperatively necessary.

THE AMERICAN PUBLIC HEALTH ASSOCIATION.

THIS Association will hold its eleventh annual session at Detroit, Michigan, from November 13th to 16th, when the following subjects will be discussed:—

"1. *Malaria*.—Its etiology and the methods for its prevention in localities or in persons; its American history; its specific particles; its origin; the conditions of its prevalence; its laws of extension, &c.

"2. *Foods*.—Their adulterations; healthy or deleterious modes of preservation and the function of legislation in regard to them. Ascertained facts as to adulterations in this country. Facts as to canned goods, condensed milk, artificial butter and cheese, prepared meats, &c.

"3. *Vital Statistics*.—Methods and results; defects apparent. How far foreign modes of tabulation are to be followed. Systems of collection and classification. Race vitality and the care of population as indicated by statistics.

"4. *The Control and Removal of all Decomposable Material from Households*.—The mechanical laws, constructions, and appliances relative thereto. The construction of all inside pipes and their connexions, their traps and syphonage, flushing, ventilation. How they shall be connected with out-door receptacles and yet be free from ill effect.

"Methods and systems of physical education, drill, &c., suitable for the school-room, will also be discussed.

"Reports are expected from special committees on compulsory vaccination, the management of epidemics, and on diseases of animals."

MISS LEARMONTH.

WE regret to have to announce that Miss Eleanor Learmouth has fallen a victim to the epidemic of typhoid fever now prevalent in Camden-town. She died on the 21st and was buried at Kensal-green on the 27th instant. Miss Learmonth joined her sisters in establishing the North-West London Hospital some three years ago, and since then has worked with great zeal in all departments of that institution. The sick poor of the north of London have lost in her a friend and benefactress, who ceased not to labour for them with great tact and devotion, until laid aside by the illness which proved fatal.

"A PAUPER KILLED BY OAKUM-PICKING."

THE Guardians of St. George's-in-the-East ought to be too well accustomed to criticism and censure to be much affected by the adverse verdict of a coroner's jury; but they are greatly exercised, and, it would seem, a good deal irritated by a recent case, and in their virtuous indignation they are trying to find a way of throwing the blame on their doctor or doctors. This is very poor policy. It must be well known to the board that the medical officer did not sanction the placing of John Simmonds in the oakum shed. On the contrary, he expressly forbade his being placed there. When Boards of Guardians, by their lay officials, elect to systematically thwart the action and traverse the recommendations of their medical officers, they should show the courage of their convictions, and, like the Commissioners in Lunacy, "take some responsibility on themselves."

DUST IN THE EYES.

AND up the nose! We wonder would it be "putting people to an enormous expense" if the contractors who—occasionally—remove the dust from bins where it has been long left to become putrid, were required to provide some sort of covers for their carts? At present it is something worse than a nuisance to have these carts lumbering and jolting over the stones in the streets without any sort of cover. A "smell" means the application of particles of odorous material to the mucous membrane of the nose. It follows that, when the horrible stench which rises from the contents of these carts makes itself known to the passer-by, he actually takes into his nasal cavity a certain amount of the putrefying animal and vegetable matter which is so offensive. The consideration is not a nice one. A very simple cover, consisting of two shutters falling together in the centre, would suffice to prevent the wind from wafting the fetid and probably morbific products of desiccated organic matter about. Will any sanitary authority consider this?

THE MEDICAL SOCIETIES.

THE sessions of most of the various metropolitan medical societies open next month, the Obstetrical Society being the first to assemble, on Wednesday next, Oct. 3rd; the Clinical meets on Friday, the 12th; the Pathological on Tuesday, the 16th; and the Royal Medical and Chirurgical on the 23rd. The Medical and Ophthalmological Societies commence later.

THE Gresham Lectures, to be delivered in Gresham College, Basinghall-street, on Oct. 2nd, 3rd, 4th, and 5th, by Dr. E. Symes Thompson, will discuss the subject of Nursing. The first lecture will treat of observation and watchfulness, the administration of medicine, methods of feeding, and how to prepare peptonised foods, &c. The second will be on knowledge and judgment, the application of external remedies, and the prevention of needless suffering. The third lecture will deal with purity and impurity, the purification of house and patient, and the various forms of, and methods of employing, antiseptics. The fourth lecture will be devoted to firmness and authority, the removal of restraints during convalescence, the importance of change of air, invalid furniture, and, finally, an account of a visit to the Hygienic Exhibition at Berlin in August, 1883.

A CORRESPONDENT of the *Veterinarian* (Sept. 1883) quotes the following figures as proving the inefficacy of the apprenticeship system. At the recent final examination of the Royal College of Veterinary Surgeons 58·83 per cent. of the candidates had served a period of pupilage apprenticeships; 41·17 per cent. had not served such pupilage; 10 per cent. of those who had served passed their examination, 90 per cent. were rejected; 57·14 per cent. of those who did not serve passed, 42·86 per cent. were rejected. Of the rejected candidates, 75 per cent. had served, the remaining 25 had not; "thus showing," he adds, "first, that the majority of students who join college have served a pupilage; second, that pupils do worse in the final examination than the 'simply theoretical students.'"

AT the meeting of the Finchley Local Board of Health on the 24th inst., the death of a woman from blood-poisoning following her confinement was reported by Dr. Turle, medical officer of health. The deceased had lived in one room, which was shared by her sister, her sister's husband, and seven children, making a total of ten persons in the one room. Besides the human beings, several dogs were kept in the apartment, and her death was attributed by the medical attendant to the insanitary condition of the place. It was remarked that such a state of things was a disgrace to civilisation, and the sanitary inspector was instructed to visit the premises and to serve the necessary notices under the Public Health Act.

JOHN RUDALL HOLMAN, M.D., Deputy Inspector-General of Hospitals and Fleets (retired), died on the 19th inst. at the age of fifty-nine. Entering the navy in 1847, he served in two arctic expeditions in H.M.S. *Phœnix;* accompanied the Prince of Wales as surgeon of the *Osborne* in His Royal Highness' first voyage in 1860; was specially nominated by the Prince to accompany him in 1869 as staff surgeon of H.M.S. *Ariadne* to the Mediterranean and Black Sea; and since that time he has been employed as fleet surgeon of the flagships on the China station, the Mediterranean station, and at home.

QUARANTINE on arrivals from Mediterranean ports has been reduced at Malta to periods ranging from four to ten days, minus the actual duration of the voyage. Arrivals from Greece are admitted to free pratique, but the quarantine regulations are still enforced against those from Egypt. In French ports vessels from Syria are now subjected to only twenty-four hours' quarantine of observation, and at Odessa and Kertch quarantine for vessels with clean bills of health has been reduced to three days' observation, counting from departure from Constantinople.

DR. ILES, who forms the subject of a short obituary notice in another column, was medical referee for Watford to the Railway Passengers Assurance Company, with which he was also assured against accidents of all kinds for £1000; and we are informed the claim of his representatives was at once admitted. We drew attention some time since to the liberal policy of this company in admitting death from pyæmia and erysipelas as accidental when produced by external injury.

AN interesting paper on the Destruction of Fish and other Aquatic Animals by Internal Parasites, read by Dr. Spencer Cobbold at the Conference at the International Fisheries Exhibition on July 12th, has been printed, in which the life history of the Ligulæ is traced at considerable length. Much useful practical information is being disseminated by means of this excellent series of "Conference Papers" of the Exhibition.

THE death at the age of eighty-four is announced of Dr. Wilhelm Baum of the University of Göttingen. He became the senior of the medical faculty on Wöhler's decease, and had long held the chair of surgery, which is now occupied by Kœnig. He was considered in Germany as one of the school of conservative surgery to which Langenbeck and Stromeyer belonged.

A WRITER in the *Boston Medical and Surgical Journal* records a case of rheumatism in the horse in which salicylate of soda administered in drachm doses every two hours was of the greatest service. Most marked improvement followed treatment for twenty-four hours, and in ten days the animal was as well as ever.

THE Local Government Board have "inquired" as to the alleged large number of "pauper lunatics" in Birmingham. It turns out that of those returned as such to, and by, the Commissioners, some are self-supporting, and therefore not paupers, and others are dead. "Anything may be proved by statistics," because *figures* are not always, possibly seldom, *facts*.

AT the last meeting of the St. Pancras Vestry it was unanimously resolved that the Sanitary Committee be instructed to consider the expediency of utilising a portion of an enclosed piece of burial-ground for the purpose of a public mortuary and coroner's court, which it was stated could be erected at an expenditure of two or three thousand pounds, and would prove of great advantage to the parish.

A REMARKABLE case is published in *L'Union Médicale*, in which ovariotomy, performed for the removal of cystic disease of the right ovary, was followed by tetanus and death a week after the operation. The only assignable local cause was the removal of the last of the sutures a few hours prior to the onset of the trismus and opisthotonos.

THE proposal of the Italian Government to summon a conference at Rome, with the object of making sanitary regulations and drawing up an international sanitary code, has been approved by the other Powers, and Signor Mancini, the Minister for Foreign Affairs, is about to issue a circular on the subject.

A PETITION, signed by over 380 Fellows, has, we are informed, been forwarded to Mr. Cadge for presentation to the Council of the Royal College of Surgeons, in support of Mr. Cadge's motion in favour of non-personal voting at the election of the Council of the College.

YELLOW FEVER appears to be prevalent at Panama. The records, however, are defective, owing, it is said, to the managers of the canal being apprehensive that injurious reports may affect unfavourably their ability to procure labourers on the works.

DR. JAMES DOWLING THRASK, of New York, died in that city on the 2nd inst., aged sixty-two. Dr. Thrask was one of the founders of the American Gynæcological Society, and had contributed somewhat largely to obstetrical literature.

THE Government of New Zealand have increased the salary of Dr. G. W. Grabham, the Inspector-General of Lunatic Asylums and Hospitals, to £1200 per annum, with the usual travelling allowances.

GREAT opposition to the granting of "off" and grocers' licences has during the past few weeks found expression in Lancashire, where no fewer than 200 such licences have been refused by the justices.

THE outbreak of a virulent epidemic at Torre Annunziata, near Naples, is announced by the Italian journals. The symptoms are considered by the doctors to indicate yellow fever.

ABOUT fifty cases of lead-poisoning having occurred at Ebbw Vale and at Tredegar, an official analysis of the drinking-water is being made.

WILLIAM GOULDSTONE has been respited until Oct. 8th, in order that inquiry may be made as to the prisoner's sanity.

SANITARY INSTITUTE OF GREAT BRITAIN: GLASGOW CONGRESS.

THE Glasgow Congress of the Sanitary Institute of Great Britain is at present in mid-career. The proceedings began on Tuesday with a public luncheon, and will end on Saturday with an excursion. So far everything promises that this, the sixth Congress, will be the most successful. The St. Andrews Halls afford ample accommodation for all purposes in one compact space, so that members do not require to leave the building on any occasion. The luncheon was well attended. The only speaking was a few graceful words of welcome from Lord Provost Ure, and the necessary reply from Professor Robinson. The company immediately proceeded to open the Exhibition in Muirbank drill hall. It was found in admirable order considering the confusion which reigned up to quite a late hour on the previous night. We must reserve for a future article any remarks upon the objects exhibited. At eight o'clock in the evening Captain Galton formally resigned his chair to Professor Humphry of Cambridge, who then delivered the opening address. The highest compliment which could be paid to the Professor was rendered by the large audience, who listened without impatience—indeed, with frequent interruptions of applause—for one hour and a half. The secret of this was probably to be found in that which might in another aspect be called a defect, the variety of the subjects touched upon, and the startling transitions from one to another. One minute we heard grave sentences as to the narrow escape from an Egyptian catastrophe as disgraceful as the Crimean, which the shortness of the recent campaign afforded; and the next the same emphasis and serious tone were expended upon a denunciation of "swathers" and long petticoats for babies; so with cramming, corns, traps, and trees. In truth, there was a want of shade and perspective; but still the address was eminently successful.

The main work of the Congress began on Wednesday with an address in Section 1 by Prof. Gairdner, in the course of which he paid an eloquent tribute to the memory of Dr. William Farr, and expressed the opinion that the Council of the Institute ought to endeavour to arrange with other like bodies to collect and publish the best of Dr. Farr's papers—a work which cannot be done without such assistance. Dr. Carpenter, as chairman of the Council, promised to see that the suggestion was not lost sight of. The first paper read was by Dr. Simpson, the medical officer of health of Aberdeen, on the "Geographical Distribution of Phthisis in the Eleven Northern Counties of Scotland." The investigation was based upon the statistics of twenty-two years collected by private correspondence from 322 separate registration districts; and the result, expressed in percentages of the total deaths, was exhibited in a large map by a variety of colours. Dr. Simpson summed up his conclusions thus:—"1. That phthisis has decreased in the north of Scotland during the last eleven years. 2. That phthisis is more prevalent on the north-west coast of Scotland than on the north-east. 3. That the east wind is not productive of phthisis. 4. That the elevated portions of the country do not stand out prominently, even although they are more thinly populated, as being freer from phthisis than the sea coast on the east, or other low-lying situations. 5. That the Hebrides are not free from phthisis. 6. That local conditions, whether they be social or geological, or both combined, appear to have a greater influence on the prevalence or non-prevalence of phthisis than any general climatic agency. 7. If there is any climatic influence, the north-west wind, combined with excessive rainfall, proves injurious." This was no doubt the best paper of the day, and Dr. Simpson was encouraged by the Section to continue his laborious investigation. Dr. Christie followed with a clear and concise exposition of the etiology, diffusion, and prevention of cholera, combating the views of Cunningham. The other papers need not be specified in detail. They sufficed to fill up a satisfactory programme. At night the Corporation entertained the Congress to a conversazione in their Art Galleries.

PERTHSHIRE MEDICAL ASSOCIATION.

THE following is a brief abstract of several papers read before this Society during last session, Mr. Alex. Thom, F.R.C.S.Ed., President. A paper by Mr. Ferguson, M.B., has been already published (see THE LANCET, vol. i., page 944, 1883), containing a singularly interesting contrast between two very different types of typhoid fever.

Dr. Calder, speaking on "Epistaxis," showed the importance of at once ascertaining whether the bleeding was likely to give relief or to endanger the patient. Apart from the plethoric and debilitated, the causation must be considered in each individual case. If arising from aortic incompetence or from mitral disease, in both of which there is venous turgescence, the flow should not be interfered with till equilibrium is established; and the symptom will return unless combated by drugs, such as digitalis or turpentine, which stimulate the heart and increase arterial tension. If irregular distribution of the blood results in epistaxis, as in place of menstruation, the chief indication is a removal of the cause; and the state of the blood in scurvy, purpura, &c., being the cause, the basis of treatment is obvious. For local application, Dr. Calder preferred a snuff of powdered kino and catechu, and objected to the iced water douche and muriated tincture of iron. When using the plugs, a solution of glycerine with thymol is a good disinfectant. The latest instrument for arresting epistaxis, the dilatable india-rubber bag, Dr. Calder showed to be an adaptation from Bell's practice at the end of last century. Dr. Bramwell thought high arterial tension the greater danger, and in these cases used nitro-glycerine.

Mr. Gillespie read a paper on the "Notification of Infectious Diseases," which elicited such interest as to demand two days' discussion. Holding that some form of notification was necessary, he believed what is known as the Edinburgh system to be the best yet suggested; but urged as a corollary to this, that the country be mapped out into health districts, so that medical officers might be appointed, independent of private practice. Various members entered at length upon the discussion, Mr. Trotter putting forward the original view that retired army and navy surgeons might be employed as medical officers of health, and removable from place to place every few years; and all concurring in the opinion that practitioners should be protected from undue interference on the part of the sanitary officials. At the second meeting a paper was read for Dr. Baird, in which it was asserted that no particular diminution of zymotic mortality had occurred in the many towns where compulsion was now the law, except in the case of Greenock, where intimation was given by the householder. He held that notification was but a small part of a much-needed sanitary reform, through which would be provided independent and specially trained medical officers, thorough isolation, and compulsory removal; without these simple notification was a sham. He asked the Association to join hands with those who had met at Liverpool, Glasgow, Worcester, and Birmingham, and object to the extension of a system so adverse to the interests, the dignity, and traditions of the profession. The Association ultimately agreed by a majority to Mr. Gillespie's motion in favour of notification by the profession, when put against a resolution by Dr. Urquhart, seeking to place the responsibility with the occupiers of the infected houses.

Dr. Bramwell read a paper on "Ununited Fractures." After dealing with the causation, constitutional and local, he proceeded to the question of treatment. Iron, good food, anti-syphilitic remedies, phosphorus or hypophosphites, or stimulants might be needed and be of great service. The different methods of local management named were—1st, rub the ends of bones together and apply splints or starch bandage; 2nd, secure fractured limb in a wooden box and apply from time to time strong tincture of iodine, or even liquor epispasticus, over seat of fracture; 3rd, resect ends of bone, or, 4th, after doing so bore and tie with silver wire (Billroth); 5th, resect and fix with ivory pegs (Dieffenbach); 6th, resect bone, insert steel nails into fragments and brace them together by transverse steel bar (Langenbeck); 7th, insert fine tenotomy knife under the skin at site of ununited fracture, tear up fibrous adhesions and periosteum, and scrape the ends of bones (Miller); 8th, introduction of a seton between fragments (Physic). Dr. Bramwell afterwards gave several illustrative cases, mentioning especially that of an old man

with an exceedingly bad fracture, cured by simple resection; and another, associated with intemperate habits, cured by Miller's operation. In spite of all treatment many cases do badly, but Dr. Bramwell urged the greatest patience and the trial of many means before resorting to amputation. Mr. Ferguson, M.B., read notes of four cases which occurred in the Perth Infirmary while he was house-surgeon. In three of the cases excellent results were obtained. In the fourth, a child, the surgeon was only partially successful. In this case rubbing and refreshing with the knife constituted the treatment.

Dr. Thom, jun., gave details of "Some cases of Paralysis," and a *résumé* of the functions of the spinal cord; he referred also to the phenomena of tendon reflex at length.

Mr. Dickson, M.B., dealt with "Myxœdema," giving a full account of the disease, and especially referring to the apparent œdema, with its characteristic appearance, the mental torpor, and the deliberateness of the movements; and mentioning as the chief pathological features the amount of mucin in the skin, and the swollen state of the connective tissue. He referred to several cases that had improved under a course of nitro-glycerine, or nitrite of amyl with heat.

Mr. Fleming, speaking on "Prolapse of the Bladder during Parturition, and Retention of Urine after Delivery," remarked upon the rarity of the first group of cases. In a case in his own practice he found that the bladder filled the pelvic cavity and resembled to the touch the membranes, except that the finger could not be passed in front. In three other cases he had found this the diagnostic symptom. Upon using the catheter, all the cases terminated satisfactorily. Referring to retention after delivery, special stress was laid upon the fact of its existence, in many cases unsuspected by the patient, and the necessity of using the catheter in all doubtful cases.

Dr. Graham read notes on a case of "Suppurating Ovarian Cyst." On being called to Mrs. W——, aged twenty-three, in February, 1881, she showed symptoms of impending abortion, which were warded off by suitable treatment. There was no tumour then; and on March 7th she was found suffering from articular rheumatism with cardiac complications. On the 12th she had great pain in the abdomen, and calomel and opium were substituted for salicine treatment. On the 18th she was much better, but on the 24th a tumour was found between the vagina and the left iliac region about the size of a cocoanut. The membranes were made out within the uterus, and the tumour aspirated on April 7th. Twenty ounces of pus were drawn off, and at a subsequent operation, on the 16th, 140 ounces. The rapidly enlarging pregnant uterus exercised pressure on the cyst, and on July 7th she was delivered of a healthy infant. The tumour again enlarged, and was aspirated on Oct. 28th; and on Nov. 13th ovariotomy was performed. There were many adhesions, and the operation was tedious. The patient died of asthenia in a few days. Dr. Graham afterwards showed a nodulated fibroid of the uterus.

Mr. Ferguson, M.B., gave the history of a case of thoracic aneurism, and exhibited the heart and aorta. The case was chiefly remarkable for the great extent of the diseased parts, and the destruction of tissue consequent on pressure.

Mr. H. McL. Wilson, M.B., read notes of a case of "Cerebral Abscess," which was under Dr. Graham's care in the Infirmary. After ten days' suffering a medical man had been called, who found the patient to be the subject of delusions, and to give a temperature chart at one time resembling that of typhus fever, then ague, and again, hectic. Slight headache, constipation, and poor appetite were complained of, and rigors occurred. Ten days after the disappearance of these last, paralysis of the left arm and slight paresis of the left leg suddenly set in; but there was no loss of consciousness. After a few weeks the patient became stupid and unresponsive, suffered from vomiting, and cough without signs of local mischief. Then came an apoplectic fit, and tonic spasms of the left side; stupidity was now marked, complete left hemiplegia, with rigidity of the left arm, and sluggishness of the left pupil were observed; and, lastly, dysphagia, stertorous vomiting, and death. At the post-mortem pus was found in the left lateral ventricle; several abscess cavities were found in the right hemisphere, and from one of these pus escaped into the corresponding lateral ventricle. The brain was shown.

Dr. Urquhart related a case of old-standing "Multiple Cerebral Abscesses," not causing death, in a lunatic, and spoke of the results of draining serous apoplexies by a needle, and of percussion of the skull as a means of diagnosis. Dr. Bramwell had, in opening the mastoid bone, just missed the cerebral abscess.

In the above condensed report we have all but omitted the discussions, which were often of considerable interest.

VICTORIA UNIVERSITY.

THE prospectus of the Medical Department of the new Victoria University, formerly known as Owens College, Manchester, for the forthcoming session has just been issued, and it would appear that a very complete education can here be given to the student, an education that may fairly be compared with those of the older universities. The Medical Department of Owens College occupies a spacious building, situated at the western extremity of the College estate, fronting Coupland-street. It contains an extensive series of laboratories, museums, and lecture-rooms, which, in their disposition and appointments, may challenge comparison with those of any medical school in England. The main part of the building was completed and opened ten years ago. The great increase in the number of students attending the school, the extension of the courses of study, and especially the wish of the governors to give the fullest possible opportunities for instruction and investigation in the departments of Physiology, Pathology, and Materia Medica, led them to sanction two years ago great extensions of the newly constructed buildings, and these are now completed, and will be brought into use during the ensuing session. The anatomical museum is large and well ventilated, and immediately adjacent to it is a bone-room, a work-room for the assistant curator, a room for the storing and preparation of subjects, an articulating room, a private room for the professor, and one for the demonstrators. The physiological department, which is under the superintendence of Dr. Arthur Gamgee, the dean of the school, is exceptionally complete, and comprises a lecture-room, furnished with every requirement for the special subject, admitting of being perfectly darkened, or lighted either by gas or the electric light; a physiological laboratory, with arrangements for instruction in histology and for occasional use for physiological demonstrations; a work-room for practical physiology, provided with several sets of recording apparatus, and the greater number of the instruments and appliances needed in the study of practical physiology and histology; a room primarily devoted to researches on the electro-motive properties of the animal tissues and to physiological optics (this room is admirably lighted, and has one window especially constructed for experiments in which the heliostat is required, it admits of being rapidly and efficiently darkened by means of blinds, and will be lighted as occasion requires by gaslight and by incandescent or arc electric lights); a photographic room, arranged so that, if need be, photographic registration of phenomena observed by the aid of the galvanometer and the electrometer may be carried on, as well as for other applications of photography to physics and physiology (this room is provided also with an ophthalmoscope lamp, and will be available for observations with the ophthalmoscope and laryngoscope); rooms for chemical balances, and for mercurial pumps and gas analysis; and a laboratory for physiological chemistry, comprising complete working facilities for twenty-four students, besides a thoroughly fitted-up demonstrators' table, and working space for making observations. There are, in addition, several rooms for special purposes, some of which will be supplied with power furnished by a gas-engine, and will be fitted up so as to permit of recording cylinders being put in motion in any part of them. The pathological department is equally well provided with accommodation, work-tables being supplied with other appliances necessary for the study of pathological anatomy, together with a laboratory for surgical pathology, in which will be lodged a typical collection of specimens illustrating surgical anatomy. There are, moreover, well-appointed laboratories for materia medica, pharmacy, and pharmacology, for the study of hygiene and medical jurisprudence, and for the study of midwifery and the diseases of women. Lastly, there is an excellent library of 26,000 volumes, to which the students have access. Upon the whole, the arrangements seem to be excellent, and we can only hope that the students for whom all this outlay has been incurred may

prove both numerous and intelligent, and hereafter worthily represent the great institution whose elaborate appointments we have thus briefly described.

USAGES AT THE SURGICAL CLINIC AT HEIDELBERG.

BY W. B. PLATT, M.R.C.S., OF BALTIMORE, U.S.

Wards.—Assistants.—Dressings.—The "Dauer-Verband."—Mode of Conducting an Operation.

GERMAN surgery from being decidedly bad, as it was thirty years ago, is probably to-day equal to any in the world as regards diagnosis, anatomical operating, and the treatment of wounds. In some of its mechanical aspects, especially such as the treatment of fractures, orthopædic and genito-urinary surgery, we would not rate it perhaps as high. Wherever there is a chance for patient work and devoted attention to detail the German hospital surgeon will always be among the first. Therefore some of the methods in use in one of their best hospitals, that of Heidelberg, may be of interest to English and American surgeons. I would like to call especial attention to the "Dauer-Verband" (permanent dressing), to be mentioned in the course of this communication.

It may be well to say in advance that German house-surgeons are called assistants, and usually retain their positions from four to seven years, during which time they have an opportunity to do many of the principal operations several times. They are in fact junior surgeons, who live in the hospital, have charge of the out-patients as well as of those in the wards, and during the absence of the visiting surgeon, who is generally the professor of surgery in the University, have his patients under their control. They are paid some small sum for their services, and, if they distinguish themselves, are usually called to occupy chairs in some other, it may be far distant, university. Czerny, the present Professor of Surgery in Heidelberg, was formerly assistant to Billroth in Vienna. Dr. Heuk, the assistant in Heidelberg, has occupied his present position several years, and will probably soon receive a call to another University. The Heidelberg Hospital receives patients from the towns or villages for miles around, and is one of the best conducted institutions of its kind in Germany. The chairs in the University of which this is a part are occupied by such men as Gegenbauer in anatomy, Kühne in physiology, Arnold in pathology, Erb in internal medicine, Becker in ophthalmology, and others of well-known reputation.

The hospital buildings are of brown stone or of brick; all the surgical, and most of the medical, patients are housed in one storey—isolated structures of the most approved barrack pattern, with excellent arrangements for ventilation and heating, and for serving the food. Although the old-fashioned windows (opening on hinges like doors) still prevail, and huge blackboards are placed at the head of each bed, on which is inscribed in chalk or white paint the name of the patient, diagnosis, &c., they do not mar in the least the practical usefulness of the whole, and the patients are extremely well nursed, fed, and treated. The wards are long, wide, and airy, containing from twenty-four to thirty beds each; the latter are rather nearer one another than in most of our own hospitals. At no time did I detect any bad odours, or, indeed, any whatever, excepting a faint one of carbolic acid or of iodoform. As to the solutions and dressings employed, for ulcers and for washing out abscesses a 2 per cent. solution of acetate of alumina is generally used. For washing out and disinfecting cavities after operation, the mouth for example, enough permanganate of potash is added to water to give it a faint rose-colour; iodoform is sparingly used in slowly healing wounds, particularly after operating for tubercular disease of the bones—e.g., after spooning out the lower end of a carious tibia. It is simply dusted on with a camel hair brush, or applied with a powder-blower. Salicylic cotton is no longer employed in this hospital; in its place the best plain absorbent cotton is used, and, in fact, it has displaced sponges altogether in the wards, although the latter, carefully disinfected, are still occasionally employed in the operating theatre. Pledgets of absorbent cotton dipped in carbolic solution, squeezed, and laid on a dish, are brought to the house-surgeon to clean the edges of wounds, absorb the pus from abscesses, &c. After being used once, they are of course destroyed. The spray is used only for operations where the peritoneal cavity is to be laid open. In place of the spray, during an operation, and whenever necessary for dressing subsequently, wounds are washed out thoroughly and frequently with a 3 per cent. solution of carbolic acid by means of an irrigator, which is hung up near by, or elevated at the proper time by an assistant. Before dressing a wound the hands of the assistant and nurse are thoroughly washed in soap and water, with the aid of a hand-brush, then rinsed in carbolic solution. All instruments are kept scrupulously clean, and put in carbolic solution before use. Soft white gauze bandages are employed almost exclusively where any are required. The ordinary cotton or linen roller is scarcely seen in the wards. These bandages are dipped in carbolic solution and squeezed just before being applied. They adapt themselves nicely to the part, are firm, cool, light, and antiseptic.

The operating arena is a semi-oval, about 25 feet by 15; beyond this are tiers of seats for students. It has a hard asphalte floor, which slopes gradually towards the centre, where is a circular grated outlet, so that the whole place can be washed out and dries speedily. Any carbolic solution getting upon the floor finds its way out immediately. At the sides of the arena are two tipping washbowls, furnished with hot and cold water, where soap and hand-brushes are always kept, and their use is required of everyone before he is allowed to touch the wound or its vicinity. Above each bowl is a receptacle for carbolic solution with faucet, to rinse the hands of assistants after washing. Near by is an ordinary cold water faucet and bowl. At a convenient distance from the operating table in the centre are four irrigators, containing carbolic solution of 1—4 per cent. These are furnished with long tubes and nozzles, and placed about seven feet from the floor. Below these are large bottles for carbolic solution, places for dressings, and, lower still, permanent receptacles for all of these. Carbolised catgut ligatures are preserved in spirit; they are in this way more manageable than when kept in carbolic oil. They are always used for ligaturing arteries, likewise often for sutures, in the form of the continuous suture, especially when it is not designed to remove the first dressing until the wound is healed, and this is the usual practice here. Drainage-tubes of the best smooth grey indiarubber are kept cut in various lengths in a jar of carbolic solution. In this clinic they are good large ones, and plenty of them, counter-openings where pus is at all likely to accumulate being promptly made. Decalcified bone drainage-tubes are at hand, and employed where it is especially desirable not to disturb the wound until all is firmly healed, as in operating for cancer of the breast. The substitute for antiseptic gauze used here seems to fulfil the two great conditions of efficiency and cheapness. In addition, it has one quality never claimed for the pure Lister dressings—viz., it is usually a permanent dressing applied directly after the operation, and remaining until the wound is healed; it consists of very thin, soft shavings ("Holzspähne") of white wood, about a quarter of an inch square, which are first soaked in a watery solution of glycerine (6 per cent.) and corrosive sublimate (0·5 per cent.), then dried and put up in bags of antiseptic gauze of various sizes, as 6×10×3 inches or 12×18×3 inches, larger or smaller according to the size and situation of the wound. These bags are placed directly upon and about the wound, with nothing whatever between them and the skin, and firmly bound in place with a wet gauze bandage, after plenty of absorbent cotton has been laid all around the edges. This dressing is particularly adapted for large wounds, such as amputations of the extremities, resections, and breast amputations. It is cheap (costing ninety pfennigs per kilo, 5½*d.* per pound), elastic, does not readily mat, antiseptic, cool, and light, and is made by Paul Hartmann of Würtemberg. "Holz-wolle" (wood-wool). A very similar dressing of wood fibre was devised by Professors Bruns and Walcher of Tübingen, and absorbs from 8·5 to 9·5 times its weight of water according to two different observers.[1] Dr. Heuk, in Heidelberg, showed me a case of resection of the shoulder on the twenty-first day after operation, at which time the wound edges were entirely and firmly united, pale-pink in colour, with a small adherent dry scab at the upper angle, where the drainage-tube had been removed. I rotated

[1] Vide Eine Neue Amputations-Methode, by Dr. Neuber, in Kiel; also Mitt. aus. d. Chirurg. Klinik zu Tübingen, 1883.

and abducted the arm quite freely without causing any pain. The first dressing (of wood shavings, "Holzspähne) had here remained on eighteen days; it was then changed, and the drainage-tube removed. Three days later the wound was completely healed, as before said. The temperature chart showed the case to have had an absolutely aseptic course. In an operation to remove an ulcerating cancer of the breast, I noticed, besides the usual antiseptic precautions, that no spray was employed, that the wound was well washed out every few minutes with carbolic solution from an irrigator; that a sheet, wet with carbolic solution, was spread over a rubber cloth across the body of the patient, for instruments when they were laid down for a moment during the operation. The skin for six inches around the breast was well cleansed with soap and brush, and then rinsed with alcohol just previous to the operation (in very oily skins ether is used instead of alcohol). A large decalcified drainage-tube was placed in the upper angle of the wound; a short rubber one in a counter-opening below. In addition to the smaller bags of the "Holz-wolle" (wood-wool) over and about the wound, the chest was three-fourths encircled with a bag of the same, about three inches thick, shaped like a cuirass, which was bound firmly on with the gauze bandage.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Carnarvonshire Combined District.—In the Bangor and Beaumaris rural part of this district health was on the whole satisfactory during the year 1882; the Bangor epidemic of enteric fever, however, included a portion of the district and led to some eighty attacks. Drainage and waterworks have been commenced at Menai Bridge, and they will be of great service in securing additional means of healthiness. In the Carnarvon rural district some scarlet fever gave prominence to the question of school closing. Mr. Rees, in referring to this, points out that though sanitary authorities are now empowered by the new Education Code to close schools compulsorily during epidemics, yet the efficacy of the enactment is greatly impaired by a power of appeal to the Education Department, and he fears that while the question is being argued out the disease will spread at its leisure. There is, we admit, the possibility of such difficulty, and yet we fear that an unconditional power of closure would hardly have been assented to by those interested in and superintending the system of public education. We are glad, however, to say that as yet we have not met with a case in which the school authorities have refused to comply with the instructions of a sanitary authority in this matter. In the rural district of Conway advance is being made as to the sewerage of Colwyn Bay, which is rapidly becoming a favourite seaside resort. Similar improvements are in progress at Llanrwst in the sanitary district of that union. The reports as to the Bangor and the Bethesda urban districts are largely taken up by an account of the late serious epidemic of enteric fever, the cause of which was, at an early date, pointed out Mr. Rees. An official inquiry was later on instituted by Dr. Barry, and comments on the subject were at the time made by us. The Llandudno urban authority have during the past year been wisely providing themselves with a hospital for infectious diseases; and in designing it they have to a great extent imitated the excellent arrangements which exist at Folkestone, and which are so specially suitable to districts where visitors may at any time need removal to hospital. Taking the combined district as a whole, we find that the rate of mortality was 18·4 per 1000. The zymotic death-rate was 2·01 per 1000, this being, in consequence of the Bangor epidemic, an increase on that for 1881, but it was still below that for England and Wales.

Ulverston (Urban).—The mortality for this district in 1882 was as high as 25·2 per 1000 inhabitants; but since the district contains the union workhouse, and as no deduction is made for persons from outside parishes dying in that establishment, the rate cannot properly be regarded as applying to the urban district. Dr. Thomson in his report deplores the fact that the urban authority failed to accept an invitation of the guardians to combine with that body in the erection of a hospital for infectious diseases; and it is evident that he refers to the guardians in their Poor-law capacity and not as a rural sanitary authority, because he goes on to say that the hospital will now be limited to the reception of pauper patients. We are bound to say that the result is in one sense fortunate; for nothing has been more clearly shown in the report of the Local Government Board on infectious hospitals than the fact that there should be no connexion between pauper and health administration in this matter. Where a district and its workhouse are such, by reason both of area and population, as not to need separate hospitals, then the sanitary authority should provide the one that is required, and all cases of infectious diseases, quite irrespective of social status, should be admitted into it, the sanitary authority alone performing the duty of protecting public health against infection. Where this arrangement is carried out it answers well; the guardians are willing to pay for any paupers they send in, and no one is pauperised by accepting accommodation which the guardians as a Poor-law authority have provided either in part or whole. In many respects sanitary progress is being made in this district. New slaughterhouses have been necessitated by the refusal to license old ones, and regular inspection of the district is maintained. The population of the district is not given in the report, but it is large enough to make it very desirable that the authority should itself undertake the removal of refuse, instead of imposing the task on occupiers.

WATER FAMINE AT MOSTYN.

At the meeting of the rural sanitary authority at Holywell, on the 21st inst., the medical officer of health presented a special report, showing the great want of a water-supply for the district of Mostyn. The district comprises a population of 2000 persons, who procure their water from fourteen wells and two open streams. The wells are, it was stated, with two exceptions, of a very questionable character, as regards both the quantity and quality of the water. They nearly all fail in dry seasons, and are, with the exception of three, quite unprotected from surface pollution. Some of them are so polluted that they are abandoned for drinking purposes, and people have in consequence to walk long distances for their scanty supply; habits of cleanliness are discouraged, the general health of the inhabitants is affected, and epidemic disease is fostered. It was decided that the feasibility of supplying the district with water from Bryneithin Pool should be investigated and reported on.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 5569 births and 3235 deaths were registered during the week ending the 22nd inst. The annual death-rate in these towns, which had been equal to 20·0 and 19·3 in the two preceding weeks, was last week 19·6. During the first twelve weeks of the current quarter the death-rate in these towns averaged 20·0 per 1000, against 20·8 and 20·6 in the corresponding periods of 1881 and 1882. The lowest rates in these towns last week were 14·6 in Derby, 15·2 in Halifax, 15·3 in Leicester, and 15·7 in Bristol. The rates ranged upwards in the other towns to 24·4 in Plymouth, 25·5 in Cardiff, 26·6 in Blackburn, 26·4 in Liverpool, and 29·0 in Newcastle-upon-Tyne. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 763 and 647 in the two previous weeks, further declined last week to 606; they included 267 from diarrhœa, 114 from scarlet fever, 68 from whooping-cough, 67 from "fever" (principally enteric), 43 from measles, 35 from diphtheria, and 12 from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Bristol and Birkenhead, and the highest in Liverpool and Preston. The fatal cases of diarrhœa showed a slight further decline from the number in the two preceding weeks, and caused the highest death-rates in Brighton, Bolton, Plymouth, and Preston. Measles showed the largest proportional fatality in Brighton and Newcastle-upon-Tyne; scarlet fever in Preston and Leeds; and "fever" in Blackburn and Wolverhampton. The 35 deaths from diphtheria in the twenty-eight towns included 26 in London, 2 in Liverpool, and 2 in Preston. Small-pox caused 7 deaths in Birmingham, 2 in London, and 1 in Liverpool. The number of small-pox patients in the

metropolitan asylum hospitals, which had been 60 and 58 on the two preceding Saturdays, was 57 at the end of last week, 10 new cases having been admitted during the week. The Highgate Small-pox Hospital contained 5 patients on Saturday last, 2 new cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 156 and 157 in the two preceding weeks, rose to 167 last week, but were 43 below the corrected average number. The causes of 74, or 2·3 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Plymouth, Leicester, Derby, Birkenhead, and Bolton. The proportions of uncertified deaths were largest in Sheffield, Wolverhampton, Hull, and Halifax.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which in the two preceding weeks had been equal to 19·5 and 19·7 per 1000, further rose to 20·0 in the week ending the 22nd inst.; this rate was 0·4 above the mean rate during the week in the twenty-eight English towns. The rates in the Scotch towns ranged from 11·9 and 16·3 in Perth and Edinburgh, to 23·2 and 27·2 in Glasgow and Paisley. The deaths in the eight towns included 95 which were referred to the principal zymotic diseases, showing a decline of 13 from the exceptionally high number in the previous week; 29 resulted from diarrhœa, 20 from diphtheria, 13 from "fever," 13 from whooping-cough, 12 from scarlet fever, 8 from measles, and not one from small-pox. These 95 deaths were equal to an annual rate of 4·0 per 1000, which was 0·3 above the rate from the same diseases in the large English towns. The highest death-rates from these diseases in the Scotch towns last week occurred in Aberdeen and Glasgow. The 29 deaths attributed to diarrhœa showed a considerable decline from the number in the preceding week, and were 5 fewer than those in the corresponding week of last year; 13 occurred in Glasgow and 4 in Dundee. The 20 fatal cases of diphtheria corresponded with the number in the previous week; 7 were returned in Glasgow, 5 in Aberdeen, and 4 in Dundee. The 13 deaths referred to "fever" exceeded the number returned in any recent week, and included 9 in Glasgow and 2 in Aberdeen. The 12 fatal cases of scarlet fever were 9 less than those returned in the preceding week; 7 occurred in Glasgow. Of the 13 deaths from whooping-cough, 10 were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns slightly exceeded the number in the preceding week, and were 9 above the number in the corresponding week of last year. The causes of 78, or more than 16 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which in the four preceding weeks had steadily increased from 21·2 to 27·5 per 1000, declined again to 24·9 in the week ending the 22nd inst. During the first twelve weeks of the current quarter the mean death-rate in the city was equal to 22·7 per 1000, against 19·0 in London and 16·4 in Edinburgh. The 167 deaths in Dublin last week showed a decline of 17 from the number in the previous week; they included 11 which were referred to diarrhœa, 5 to whooping-cough, 4 to scarlet fever, 4 to "fever," and not one either to small-pox, measles, or diphtheria. Thus 24 deaths resulted from these principal zymotic diseases, against 19 and 38 in the two preceding weeks; they were equal to an annual rate of 3·6 per 1000, while the rate from the same diseases in London was 2·8 and in Edinburgh 2·0. The deaths from diarrhœa showed a considerable decline from the number returned in the preceding week. The fatal cases of scarlet fever also showed a marked decline from the high number recorded in the previous week; the deaths referred to "fever," however, showed a slight increase. The deaths of infants were below those returned in recent weeks, whereas the deaths of elderly persons were slightly in excess. The causes of 30, or nearly 18 per cent., of the deaths registered during the week were not certified.

ROYAL COLLEGE OF SURGEONS.—The Library and Museum of this institution will be re-opened on Monday next.

THE SERVICES.

Surgeon-Major J. G. Rogers has, with the approval of the Secretary of State for War, been appointed principal medical officer of the new Egyptian Army.

Surgeon-Major Scanlan, Surgeon Moore, and Surgeon Allen, Army Medical Department, left Portsmouth, on the 20th inst., in the *Himalaya* for Malta.

ARMY MEDICAL DEPARTMENT.—Surgeon-Major Edward Nicholson has been granted retired pay, with the honorary rank of Brigade Surgeon. Surgeon Joseph Moran Prendergast has resigned his commission.

RIFLE VOLUNTEERS.—1st Hampshire: Acting Surgeon Arthur Robert Wyatt Sedgefield, M.B., resigns his appointment.—2nd Volunteer Battalion (the Norfolk Regiment): Honorary Assistant Surgeon William Woodham Webb, M.D., resigns his commission.

ADMIRALTY.—The following appointments have been made:—Surgeon John L. Barrington to the *Cambridge*, vice Stace; Surgeon Malcolm V. Stace to the *Repulse*, complement incomplete; Surgeon George R. D. Charlton to the *Indus*, vice Price; Surgeon John Price to the *Flying Fish*; Staff Surgeon Albert Blood Tronsdell to the *Tenedos*, vice John Shields; Surgeon Alexander W. Watson Reid to the *Tourmaline*; Surgeon Charles Anderson to the *Asia*, vice A. W. W. Reid; Staff Surgeons John Buckley and Matthew Trevan, additional, to the *President*.

Correspondence.

"Audi alteram partem."

"TREATMENT OF CHOLERA."

To the Editor of THE LANCET.

SIR,—Dr. J. Carrick Murray, in your issue of July 28th, writing under the above heading refers in the latter part of his letter to hydrate of chloral, and says, "Hydrate of chloral has not been given for cholera internally so far as I know." I have recently been trying its effects in the treatment of cholera by hypodermic injection in consequence of some remarkable results I obtained here in the year 1877 in twenty cases which I treated by this method and which I reported officially. Of the twenty cases I then treated six died, but these deaths have the following remarks after them, which speak for themselves, both as to the cause of death and the absence of selection:—"A skeleton; not seen till collapsed and pulse imperceptible; very old—very old indeed; would not take internal medicines; a famine victim in dispensary with pleurisy." Fifteen other cases occurred which were not treated at all, and thirteen died. This is so extraordinary a result that it seems scarcely credible, but I can personally vouch that the cases were not selected and that I treated all the patients I could get. From May 14th to June 22nd of this year, I have had 117 cases of cholera under my supervision, and I made what I considered at the time trustworthy arrangements for having this treatment carried out thoroughly and carefully. I am sorry to say that I was disappointed; but though the treatment was not carried out as I wished, it was carried out to a certain extent, and I here give the results. Of the total 117 cases that occurred in this town the hospital assistant reported that sixteen deaths occurred before the reports arrived and he could put the patients under treatment; including these, however, there was a total of forty-four deaths, or 37 per cent. In the remaining villages of the Talvoka 1771 cases were reported with 811 deaths, or 45 per cent. These figures in fact demonstrate that the cases treated show eight deaths less in every forty-five than those untreated, not taking into consideration even that sixteen of these deaths occurred without treatment.

It is my custom to give very large hypodermic injections of chloral; internally ten grains dissolved in fifteen or twenty minims of water every hour, and if this is not sufficient, even double the strength in some cases; this, moreover, is combined with a mixture of spirit of ether, spirit of chloroform, liquid extract of bela, and tincture of catechu. As will be seen, the treatment is more or less a sedative one combined with simple astringents, the volatile ingredients selected being

considered to be the most likely to be absorbed. To support the patient I give large quantities of brandy and milk, and I think that Liebig's extract might be added with advantage.

As regards the cold or collapsed stage of cholera, I believe that it is particularly due to a contraction of the muscular fibres of the bloodvessels, and also in a lesser degree of the muscles, as the result of an irritant action of the cholera poison on the nervous system, both peripheral as well as central; and I believe that this state of tonic contraction forces the blood into the larger venous trunks, where, owing to the diarrhœa and consequent inspissation, its circulation is further interfered with. There is no diminution in the blood changes going on, but rather the contrary, as evidenced by the fact that the temperature in the rectum is increased. If we can dilate the capillary system, we may also possibly be able to check the diarrhœa by the removal of the extreme blood-pressure, and this can only be done by counteracting the irritant influence of the cholera poison by sedatives. The cramps themselves are the visible phenomena of the irritant action on the peripheral cerebro-spinal nervous system, and even after death, when the body becomes quite hot from a return of blood into the peripheral vessels, the irritant action still continues, when we get such phenomena as the corpses half sitting up. Again, if the temperature rises in such a marked way immediately after death, why should not the blood circulate in the tissues in the same way before death, unless there be some inhibitory action during life? Evidently this points to inspissation and diminished cardiac action not being the only cause. And, again, if the cholera poison itself interferes with the circulation, it ought to do so after death as well as before. Brandy, I believe, in this hot country on an empty stomach is one of the greatest sedatives we have, producing relaxation and turgescence of the vessels, the very condition we want to produce in the case of cholera; therefore I give it in the hope that it may be absorbed.

As regards the results of the whole treatment on patients, it seems almost invariably to have a markedly beneficial effect. The diarrhœa or vomiting is either partially or completely checked, the cramps are relieved or disappear entirely, and the cardiac oppression is sensibly diminished. This occurs in a more or less degree in almost every case; and it may be that in many instances failure is due to not pushing the treatment far enough. I may as well here give an almost verbatim translation of a statement made by one of my cholera patients who happened to be present when I was making a report. He stated that he felt stronger, and that the sense of cardiac oppression was greatly relieved, immediately after the treatment was commenced and as it was carried out; that from a state of half stupor he became sensible after each injection and dose were administered, and that the diarrhœa, vomiting, and cramps were sensibly relieved. Large quantities of chloral can be given with impunity, and nothing but benefit accrues even when collapse has set in. I had only one instance of ulceration caused by the injections; this was a Purdahnasheen woman, who was unhealthy and stout. The arm became very much swollen, but ultimately the swelling resolved itself into an ulcer the size of a shilling, which soon healed. I cannot say more for the treatment than that were I seized with cholera I should certainly put myself under this *régime* at once and thoroughly, as being one which I have some faith in, and I recommend it cordially for trial to my professional brethren.

I am, Sir, yours truly,

ALEX. STEWART, M.B.,
Bombay Medical Service.

Bombay, Aug. 16th, 1883.

To the Editor of THE LANCET.

SIR,—Now, that the attention of Europe is directed to the subject of cholera, the experience of the writer, gained from a rather extensive acquaintance with the disease in India, might probably prove useful. I shall confine my remarks just to a few points. In THE LANCET of the 28th July, Dr. Carrick Murray, of Newcastle-on-Tyne, says: "Hydrate of chloral has not been given internally in cholera so far as I know." As far back as 1870 I gave the remedy by mouth in the collapse stage of cholera. My results, which seemed hopeful, were published in the *Indian Medical Gazette* of that year. Circumstances prevented my devoting attention again to the treatment of cholera till 1880, when an epidemic broke out in the district of the North-Western Provinces, to which I was attached. I then gave chloral both by mouth as well as hypodermically, with very encouraging results. The strength of the hypodermic solution was one grain of chloral in ten minims of water.

In April, 1881, there was another outbreak of cholera in the same district. Some patients were treated under the same conditions and in the same manner as in 1881; I regret to say with most disastrous results—out of fifteen cases ten died. Chloral, which administered under my own care had seemed beneficial in one epidemic, administered under similar conditions proved useless in another epidemic. It then struck me that an antiseptic agent might be found antagonistic to the dread malady with which we were dealing. I have therefore abandoned chloral, and give now by mouth as well as hypodermically carbolic acid and iodine, according to the formula noted below. In the first stage of cholera, when a good sedative is needed, chloral will, I believe, be found useful, though my reliance in this stage is on opium or morphia given pure or in the combination known as chlorodyne. The formula referred to above is:—

Carbolic acid	100 minims.
Tincture of iodine	500 ,,
Water	400 ,,
	1000

There is one minim of carbolic acid in ten minims of the solution. The mixture is given only by mouth if collapse be mild and vomiting not severe; but when the stomach is very irritable or there is intense collapse, it is injected hypodermically every half hour, up to twelve doses, when it is advisable to stop treatment for two hours, resuming it if the pulse has not returned and kidney reaction not set in. The same rules for administration are followed when the mixture is given by mouth. I have never found any local irritation follow the repeated hypodermic injections, beyond slight soreness of the skin. Care must be taken to inject deeply into the muscular tissue. The results of treatment are very good. In one village, for instance, out of twenty-two cases treated two only died. In another village, out of twenty-four cases, three died. These villages abounded in insanitary conditions, and the patients would not be removed from their homes. The results noted are remarkable, as the character of the epidemic was violent. In the village noted, where twenty-two cases were treated, every case had died previous to my visit. The proportion of deaths to attacks in the district generally was from one-half to two-thirds.

As dispensary house-patients a few cases only have as yet been treated. It is when patients can be placed in proper sanitary surroundings that the efficacy of any line of treatment can be tested. Hence, after repeated failures as to the efficacy of drugs which at one time seemed promising, the writer is doubtful of the value of any agent in the collapse of cholera until it has been tried in a large number of cases in a well-managed institution. It is in the hope that when opportunities offer my professional *confrères* will put antiseptics to the test that this letter is written.

I am, Sir, yours truly,

G. D. M. REDDIE, M.D., M.R.C.S.

Unno, Oudh, India, Aug. 20th, 1883.

NEW DISEASES OR DEVIATIONS FROM OLD ONES?

To the Editor of THE LANCET.

SIR,—In his Bradshawe lectures Sir J. Paget argues that many diseases which have come under the notice of the physician and attracted much attention within the present century may be correctly regarded as new diseases, although perhaps only deviations from some previously well-recognised typical disease—the older form of disease becoming rare the variation more frequent. Sir J. Paget draws this conclusion from the circumstance of there not being any medical record or description of any cases corresponding with those now frequently observed, while the old typical disease may be traced back to "prehistoric times." Sir James observes that he founds his arguments on facts, to which he reluctantly refers. On these facts he builds a superstructure of "guessings" and "imaginings" after the Darwinian manner. It would savour of presumption for anyone less gifted and of

inferior professional experience to challenge the correctness of his deductions or place his own "guessings" and "imaginings" *côté-à-côté* with Sir J. Paget's. Nevertheless, while it is given to few, I should imagine, to search the records of prehistoric times for those types of disease maintained with such tenacity that they are recognised by physicians and pathologists as existing at the present time, it may still be a moot point, and one capable of being argued, whether the so-called deviations or new diseases may not be accounted for on some other ground than that of having only escaped *ab ovo* in the present century. However, without discussing the new disease theory, it is not a little remarkable that when attention has once been drawn to some phase of morbid action formerly of rare occurrence, perhaps scarcely noticed, numerous examples appear to spring up suddenly, and become the subject of general observation. This, I think, is particularly noticeable in diseases of the heart and bloodvessels. Amongst these, heart-clot and embolism are notable instances. Thus, in one number of THE LANCET, in January, we find three rather long articles on embolism, a condition which Sir J. Paget has expressly pronounced not to be a new disease. About the same time I was called to a case which, as it is connected with this subject and presents some unusual features, I beg permission to relate.

The patient was supposed to be suffering from apoplexy. The young woman in charge of the house where the patient lived was of an observant nature, and, as she stated, not at all nervous. She had heard that stertorous breathing indicated apoplexy. The patient, after she became insensible, had stertorous breathing, the *ergo* was therefore clear enough. Before I reached the house I was met by the messenger, who anxiously inquired whether it was not a bad symptom if on touching the eye the lids did not close. I was therefore fully prepared to see death. On the bed lay a young woman who, I was told, was sixteen years of age, but presented the appearance of nineteen. The young woman in charge, the eye-tester, gave the following account:—The night previous to the patient's death she was attacked with severe headache and sickness, the vomited matter having the appearance of bile, and to this cause the illness was attributed. The next day she got up, but was not allowed to work. She made very little complaint during the day. Although sickness had not returned she was disinclined to take food, which seemed further to confirm the notion of its being a bilious attack. Between 5 and 6 o'clock she became worse, was assisted upstairs, undressed, and put to bed, complaining greatly of her head. About 9 o'clock convulsive strugglings came on, the face and lips assuming a dark hue. It then appeared to the person in charge time to send for a medical man. I received the message at 9.30 P.M. and at 9.40, when I arrived at the house, the patient was dead. I think the natural surmise would be that some cerebral mischief was the cause of death. The post-mortem revealed no such indication. No ruptured vessel, clot, or effusion of any kind; the brain substance was of natural firmness; the puncta not unusually numerous. The lungs were much congested with many tubercular deposits in the cretaceous state. The liver was also congested, but no particular collection of bile in the gall-bladder. The stomach contained a little fluid, but there were no patches of discolouration. In the pericardium there was a little effusion of sanguineous hue. The walls of the heart presented a mottled appearance from fatty degeneration; the right ventricle was filled with coagulum, which escaped as the cavity was opened, amongst which was a clot of firm fibrine, about the size and shape of a pigeon's egg, weighing nearly half an ounce. On inquiry, the family history revealed phthisis and heart disease. The deceased's mother died from heart disease; her aunt was found dead in bed, and was known to suffer from heart disease; other members also suffered from the same and from phthisis.

I think the case presents several points of interest. Upon a cursory examination the symptoms seemed to indicate stomach derangement affecting the head, or head trouble causing the stomach disturbance. No complaint of pain in the region of the heart; no shortness of breath, except on one occasion after stooping, which attracted no particular attention then, but was remembered by a fellow-servant; no previous illness of any kind, having had good health from childhood. Then the early period for such a formation, the size of the clot, and the absence of any indication of the presence of such a substance in the heart, where one would think a body of that size would be driven against and seriously interfere with the action of the valves. Then how can we account for its formation and growth? There is no account of cardiac trouble, phlebitis, rheumatism, or inflammatory attack of any kind; indeed, no disease either new or old on which to base a theory. Must we fall back on "inherited disease," which implies so much, yet reveals so little, of the how and why of morbid action and pathological changes? Constitutional diathesis might answer, combining inherited proclivities and individual peculiarity. I suppose, looking at the fact that several members of the family suffered from disease of this organ, and, as Sir J. Paget says (speaking of phlebitis), it is not accident which determines the disease to the veins, for it runs in families; and, as in osteitis deformans, "a likeness may be imagined to several other diseases which may indicate a combination in definite proportions of transmitted disposition to those diseases," or by "further imagining" and "guessing to the furthest bounds of propriety"; and thus by exercising the use of the imagination, "which may happily discover a way towards the truth,"—we may arrive at the conclusion that "combinations in definite proportions accumulating and converging," formed this egg shaped half ounce of fibrine in the heart.

I am, Sir, yours faithfully,

St. Mark's-square, E., Sept. 1883. CHARLES DAY.

"LOOSE CARTILAGE IN THE KNEE-JOINT."

To the Editor of THE LANCET.

SIR,—Having read in your last issue an account of a loose cartilage removed from the knee-joint of a student at King's College Hospital by Mr. Royes Bell, it may interest your readers to read an account of another similar case.

I may state that I am an old student of King's College, and that a loose cartilage was removed from my right knee-joint in April last. As far as I can remember I sprained my knee at cricket, and it gave me some pain at the time, but I was not confined to bed or the house at any time. A year or two afterwards I often felt a sudden pain on the inner side of the joint, and would be lame for some time; then all pain would suddenly cease, and I would not feel it again for weeks. About this time I felt what appeared to be a foreign body under the skin, about the size of a split pea, and this went on for about two years more. I never detected any swelling or excess of synovia in the joint. I should state, however, that I have suffered for years from rheumatism of the joints—knee, hip, and shoulder; but never from an acute attack.

In April of this year, after extra exertion at lawn tennis, I suddenly, and for the first time, felt excessive pain on the outside of the right knee-joint. On examination, a small body, similar in size to what I had before felt on the inner side, could be detected under the skin. The pain was more acute than anything I had experienced before, and prevented me from extending the leg. I was unable, too, to push the small body back into the joint. I therefore fixed it with plaster and a light bandage, and asked my old friend, Dr. T. D. Griffiths of Swansea, to examine and remove it. On the following day he cut down upon it antiseptically, and removed it. Had I known it would have been such a painful and tedious operation, for it slipped into the joint once or twice, and was with considerable difficulty seized, I would certainly have taken chloroform or ether. Three sutures were inserted, the wound was dressed, and a back splint applied. Two days after it was again dressed, when not a particle of pus escaped, and practically the wound was healed—no swelling; no pain now present. A plaster-of-Paris bandage was placed round the joint, and seven days after everything was taken off, and I was able to walk about, and felt only a little stiffness. From that time to this I have been absolutely free from pain in the joint; but I regret to say I have had considerable and persistent pain in the back of the left knee-joint, evidently showing that rheumatism is still lurking in my system, and seems to defy all treatment.

I ought to state that when removed it was the size of a split pea, white and glistening; oval on one side, convex on the other. I am, Sir, yours obediently,

Morriston, Sept. 17th, 1883. E. RICE MORGAN.

THE prevalence of scarlet fever in Dudley has made it expedient, in the view of the School Board, to close for the present all the schools under their jurisdiction in the town.

LIVERPOOL.

(From our own Correspondent.)

THE MEDICAL FACULTY OF THE LIVERPOOL UNIVERSITY COLLEGE.

THE opening meeting of the session takes place to-day (Saturday), under the presidency of the Earl of Derby, the President of the College. Lord Derby has shown his continued interest in the prosperity of the College, as this is the third annual occasion at which he has presided. The address will be delivered by Professor Herdman, D.Sc., after which the award of scholarships and exhibitions will be announced, and the prizes gained by students of the Medical Faculty will be distributed. These annual gatherings have of late been so large as to necessitate their removal from the School of Medicine, where even the large theatre was too small, to the small concert-room of St. George's Hall, while the presence of ladies is an additional and attractive novelty.

THE CITY COUNCIL AND THE HOSPITALS.

At a special meeting of the City Council held on the 26th inst. the proposed site for the new buildings of the Royal Infirmary came before the Council on a motion "That the town clerk prepare a Bill, give the necessary notices, and take all other requisite steps to carry into effect the resolution of the Council of the 4th April last, directing an application to Parliament for a Bill to authorise the transfer and exchange of lands for the rebuilding of the Royal Infirmary, and that the matter be referred to the Parliamentary Committee." To this the following amendment was moved and carried by nineteen votes to fifteen:—"That the subject of carrying into effect the resolution of the Council of the 4th of April, 1883, as to the rebuilding of the Royal Infirmary, and the subject of providing a site for an infectious diseases hospital, together with the question as to the claims which other kindred institutions may have to receive grants from the corporate funds, be referred to a special committee with authority to communicate with the trustees of the institutions affected, and with instructions to report as to the best method of dealing with these matters without imposing an unreasonable burden on the ratepayers." Subsequently a committee was appointed, consisting of seven members of the Finance Committee and seven members of the Health Committee.

THE SURGICAL WARDS OF THE ROYAL INFIRMARY.

On the 26th inst. Mr. Reginald Harrison removed by lithotomy a large stone from an adult male patient; further details of this case will be published. In Mr. Bickersteth's wards are many interesting cases. Among his patients is a youth, aged eighteen, with a large abdominal tumour, from which, on tapping, a quantity of coffee-coloured fluid was drawn. From its situation and other circumstances, Mr. Bickersteth is of opinion that the tumour is splenic. In the same ward is a man with a large abdominal abscess, from which a considerable quantity of feculent matter was drawn, together with a small portion of bone. The patient is somewhat emaciated from the daily discharge of pus, and as the cause of the abscess is uncertain, Mr. Bickersteth hopes shortly to ascertain this by exploration. He has in another ward two male patients, from one of whom the whole of the lower jaw was recently removed in consequence of epithelioma; from the other a portion of the left side of the lower jaw was removed for the same disease.

INFIRMARY FOR CHILDREN.

Dr. Armstrong has recently had under his care a case of hysterical paraplegia in a girl eleven years of age, who had suffered more or less for four years, and had been quite unable to walk for sixteen months previous to her admission into hospital. With little treatment beyond antispasmodics and tonics, she was able to walk about the ward perfectly well in a few days, and after being at the Convalescent Home returned in perfect health. Subsequently she complained of her sight, and was found to be suffering from what has been called hysterical amblyopia. In a case of obstinate pemphigus the benefit of arsenical treatment was shown, the arsenic being pushed until its physiological effects were produced. In the treatment of spinal diseases, plaster-of-Paris jackets, with and without jury-masts, are still extensively used, with the most satisfactory results. Several cases of spina bifida have been cured by the injection of Morton's solution.

NEWCASTLE-ON-TYNE.

(From our own Correspondent.)

CLOSING OF A COLLIERY VILLAGE IN DURHAM.

THE village of Broompark, near Durham, the property of the North Brancepeth Colliery Company, has been closed by an order of the magistrates owing to its insanitary condition. It was represented to the bench that the whole of the houses, forty-nine in number, were in an insanitary condition, as reported to the Local Government Board by the medical officer of the district, Mr. W. C. Blackett, and that owing to the deficient water-supply and bad drainage several deaths from fever had taken place, and the cottages were declared in their present state to be unfit for human habitation. This prompt action on the part of the authorities is certain to produce good effects, not only in the village vacated, but likewise in many of the Durham colliery villages, the owners of which must be well aware of the danger to health caused by the unhealthy surroundings of their workmen's houses, and the risk they incur in allowing them to continue, for to a colliery in anything like full work the closure of the houses and dispersion of its workmen mean a very serious loss to the owners.

HIGH DEATH-RATE OF NEWCASTLE.

The high death-rate prevailing in this city lately has been the subject of comment in our Council. It would appear to have been caused chiefly by an epidemic of measles and diarrhœa. The epidemic of measles was the most serious that has visited us for several years, in some localities scarcely a child who was not protected by a first attack escaping, while second, and even third, attacks have not been uncommon. The disease, too, has been of a virulent type, fatal chest and head complications being frequently observed.

HEALTH OF SUNDERLAND.

Sunderland, after escaping for a considerable period from small-pox, would now seem to be at the commencement of an epidemic of this disease, for which, as regards hospital accommodation, it would appear to be very badly prepared. Mr. A. E. Harris has been re-elected medical officer of health for the borough for a period of five years, and it must be the more gratifying to that gentleman as he was elected by the unanimous vote of the Council.

DEATH OF DR. A. S. DONKIN.

This gentleman, who was well known in the north, having been in practice here and at Sunderland, and a lecturer on medical jurisprudence at our college for several years, died on the 3rd ult., under the care of Dr. Eastwood, of Dinsdale-park, near Darlington, in his fifty-fifth year, from degeneration of cerebral arteries, after an illness of nearly six years. Some years ago he removed to London and commenced practice as a physician in the West-end, when he published a work entitled "The Skim-milk Treatment of Diabetes, &c." This for a time attracted considerable attention in the profession, but I believe, like other special modes of treatment for this intractable and curious disease, it soon fell into disuse. Dr. Donkin had a considerable amount of originality and force of character. He will be chiefly remembered as a microscopist, in which department of natural science he did good work. His labours in the identification and classification of the diatomaceæ, particularly the marine diatomaceæ of Northumberland, are well known, and are considered to rank in importance with the work and discoveries of Mr. Tuffin West and other great microscopists.

Newcastle-on-Tyne, Sept. 25th, 1883.

THE HOWARD MEDAL.—The Council of the Statistical Society have chosen as the subject for the essay in the competition for the Howard Medal (1884) "The Preservation of Health, as it is affected by Personal Habits, such as Cleanliness, Temperance, &c.," and have again decided to grant the sum of £20 to the successful candidate. The essays must be sent in on or before June 30th, 1884.

SCOTTISH NOTES.

(From our own Correspondent.)

PROFESSOR RAY LANKESTER ON THE SCOTTISH UNIVERSITIES.

WHEN Mr. Lankester went "wool-gathering" at Southport, his dissatisfaction with the present endowments allotted to physical science so overcame him that he dealt blows equally upon friends and foes, and instead of merely crying in the wilderness for £2,000,000 as an aid to science in England (poor Scotland and Ireland may afford to wait), he made an attack upon our universities in Scotland, which was as unjust as it certainly was (coming from Prof. Lankester) ungenerous. It has been frequently asserted that the munificence of private individuals, and occasionally of corporations, has in this country throughout its history been the chief aid to a higher education; and had the study of biology been fashionable or possible during the years when our great universities received their handsome legacies, it is all but certain that the address at Southport would not have been delivered. But it is not to object to the endowment of research, an aid which most scientific men would welcome, that it is necessary to notice Prof. Lankester's address. He attacks the Scottish universities apparently because they have endowments, but of a different kind to those he would wish. A gentleman whose class fee is £6 6*s.* does not think it unfair to acquaint the world that others, whose fees are each £3 3*s.* (a point not mentioned by Prof. Lankester), have a handsome endowment at the cost of the students. At Edinburgh the fee is £4 4*s.* intra-mural, and £3 5*s.* extra-mural, so that this difference of a few shillings is enough to cause a distinguished teacher to traduce a system which probably his few days' sojourn at Edinburgh failed to make him completely acquainted with. At a time when in three out of the four Scottish universities special means are being sought, not from the State but by private effort, for the furtherance of original research, this discourteous cry from the South is peculiarly annoying. In each of our medical universities the professors of anatomy, botany, physiology, and natural history are distinguished men devoted solely to their subject, and at Aberdeen the professor of pathology is in a similar position. Each of these classes gives employment, as assistants, to one man, and in many cases to several men, whose training is enough to secure professorial appointments in other colleges. If, instead of traducing our system, which is a model to rising colleges throughout the world, Professor Lankester had claimed for these assistants better salaries, he would have helped rather than hindered the cause he has at heart.

OVER PRESSURE IN SCHOOLS.

The excellent address of the President to the Educational Institute in Scotland, and the reception his remarks on over-pressure in schools met with, show that Parliamentary discussion has not convinced those direct observers that the evil is so small as Lord Carlingford and Mr. Mundella maintain. It appears that these gentlemen had the opinions of the inspector as authority for their optimist views, but Mr. Ramage holds that these gentlemen are not aware of the amount of pressure needed, and that the necessity of the dullest children being compelled each year to pass a standard is the secret of the malady. It is at least noteworthy that the schoolmasters of the country are almost unanimously of opinion that many pupil teachers and children alike suffer from nervous derangement due to overwork.

THE NORDENSKJOLD GREENLAND EXPEDITION.

The arrival of Baron Nordenskjold and party last week at Thurso was an agreeable surprise to the people of that town. It appears as if a greater amount of knowledge has been gained by this than by many more pretentious expeditions. Some Laplanders of the party advanced 230 kilometres over a snow desert, and reached an altitude of 7000 feet, so that there is no snow-free interior there; and a suitable opportunity occurred for the study of an ice-covered country. Masses of fine dust, partly of cosmical origin, were found in the ice. A rich supply of zoological, botanical, and geological specimens has been secured; some remains from the Norman period were noticed; and observations on the temperature of the sea prove that the cold current packing the ice along the east coast of Greenland is very insignificant, that the glaciers of the east coast are unimportant, and the fiords are free from ice.

It has been agreed that the 1885 meeting of the British Association shall be held at Aberdeen.

IRELAND.

(From our own Correspondent.)

CASES OF ASIATIC CHOLERA AT SLIGO.

ON Wednesday, the 19th inst., a quay porter, named Kelly, aged forty, a man of intemperate habits, was admitted into the Sligo Fever Hospital, under the care of Dr. Murray, in a state of collapse. When admitted, the extremities were cold and livid, pulsation imperceptible either in arms or legs, eyes sunken, voice husky, tongue dark, intense thirst, and rice-water stools. He was admitted about one o'clock, and died eight hours afterwards, being conscious to the last. It must be acknowledged that Dr. Laird, who first saw the deceased early on the 19th inst., and who, with Dr. MacDowell of the County Infirmary, recommended his being sent to the Fever Hospital, denies that the case was other than an aggravated example of ordinary English cholera in a man broken down by intemperance. Dr. Murray, it is stated, is of a contrary opinion, and believes that the case was unmistakably one of Asiatic cholera, and in corroboration of this I may mention the following circumstance, which if it does not confirm his opinion must be regarded as a remarkable coincidence. The man Kelly died on a Wednesday, and on the Friday following a man was employed to disinfect the house and clothing of the deceased; he became ill on the following day, and died the same night. Considering all the circumstances—viz., the short illness of the man Kelly, the state of collapse, the suppression of urine, the characteristic rice-water evacuations, and the short and fatal illness of the second case,—there can exist, I think, little doubt that these were genuine cases of Asiatic cholera.

PROFESSOR REDFERN OF BELFAST.

The professorship of anatomy and physiology in the Belfast College, vacant by the resignation of this gentleman, is in the gift of his Excellency Earl Spencer, and will be filled up next month. The appointment is an important one, and the most lucrative chair in the Queen's Colleges; so that it is sincerely to be hoped that a suitable successor may be selected in the room of Prof. Redfern, who for so many years satisfactorily discharged the duties appertaining to the post. It has been suggested that a testimonial should be presented to Prof. Redfern, but up to the present the proposal has taken no definite shape.

SCHOOL OF PHYSIC, TRINITY COLLEGE, DUBLIN.

The election to the professorship of anatomy and surgery, vacant by the resignation of Dr. Macalister, is arranged to take place on the 29th inst. (to-day). It is rumoured that Dr. Cunningham, of the Royal College of Surgeons' Medical School, will be elected; and should this be the case a vacancy will necessarily arise in that institution. The fees and salary attached to the latter are supposed to be worth about £600 a year, but £400 would probably be nearer the mark. A great deal, of course, depends upon the number of students attending the school; but it must be acknowledged that during the last few years a decided decrease in this respect has taken place.

ALLEGED POISONING AT NEW ROSS.

About a fortnight ago I drew attention to the numerous cases of poisoning from some irritant substance which occurred at New Ross, Wexford, and from the effects of which two deaths had taken place. An inquiry was instituted, and the food used was analysed by Prof. Cameron, also the stomach and other portions of one of the decedents. Prof. Cameron found no poison in the viscera or food, and is of opinion that death arose in both of the cases from a diseased condition of the meat eaten. The animal slaughtered was supposed to have died of dry murrain, but a veterinary surgeon, who was sent down specially to investigate the occurrence, is of opinion that the animal died of a more serious disease, known as splenic apoplexy, which would render it unfit for human food.

THE SALE OF POISONS.

Certain persons connected with the drug trade in Ireland have recently addressed a petition to Earl Spencer requesting him to have the existing regulations revised as follows:—1st. By having the present dealers in poisons and drugs registered under a new Act. 2nd. By providing a test examination for the continuance of their business as such under the title of chemists and druggists. 3rd. By abolishing the preliminary examination and apprenticeship. 4th. By recognising the right of the registered pharmacist to keep open shop for or in partnership with an unqualified person. The petitioners have been informed that the matters to which they refer will receive careful consideration in the event of a Bill being introduced into Parliament to amend the Pharmacy (Ireland) Act, 1875; further, that the Privy Council have no power to withdraw the sanction which they have already given to regulations made by the Pharmaceutical Society under the provisions of the said Act.

QUEEN'S COLLEGE, GALWAY: ANNUAL REPORT.

The Act of 1879 established the examination system, as distinguished from the collegiate, on the broadest possible basis. That continuity of teaching and correlation with examining which was the essential characteristic of the Queen's University and Colleges was set aside. The President, in his annual report, believes it would still be premature to forecast the larger issue as to the ultimate effects of the new system on the higher education of the Irish people, yet so fundamental a change in university organisation could hardly fail to produce certain appreciable results; and its immediate influence has been felt in the Galway College in the serious decline of the number of students on the rolls. To take, for example, the Faculty of Medicine. Last session there were 70 names entered, as compared with 122 the previous year. Various causes may be given for this result, but the decline is almost exclusively confined to the Faculty of Medicine, a department which it was foreseen would be especially affected by the substitution of the Royal University for its predecessor. Some young men, the President remarks, who are looking forward to the medical profession, may have absented themselves with the intention of preparing at home, or under private tuition, for the first University examination in Arts required by the regulations of the Royal University before entering upon their professional studies; others may have proceeded to other institutions, where, without incurring the year's delay and expense, they may be able to obtain the necessary qualifications for practising their profession. All that can be said is that the decline is clearly assignable to external circumstances, not to internal defects, and that the system of instruction which has proved so successful in the past will be maintained with unabated vigour in the future.

The chair of medicine in the Ledwich School of Medicine, Dublin, which had become vacant in consequence of the resignation of Dr. Foot, has been filled by the election of Dr. Knight, of Mercer's Hospital, and Dr. Redmond, of the Mater Misericordiæ Hospital, who will occupy it jointly.

A very serious epidemic of scarlatina exists at present in Londonderry, and last week out of fifteen deaths registered six were from that disease.

The Executive Committee of the Dublin Sanitary Association have invited the Sanitary Institute of Great Britain to hold their annual meeting for 1885 in Dublin.

Obituary.

CHARLES STEWART CLOUSTON, M.D. EDIN.

DR. CHARLES STEWART CLOUSTON, of Gunnersbury, London, who died on Sept. 16th, 1883, has been cut off in the very prime of his life, being only thirty-six years of age, a victim to the risks of professional duty, having caught a bad attack of scarlet fever some years ago from a patient, to which his later illness can be traced. He was the son of the Rev. Charles Clouston, LL.D., for sixty years minister of the parish of Sandwick, Orkney, and now the venerable father of the Church of Scotland, and the oldest member of the College of Surgeons of Edinburgh. Dr. Clouston inherited his father's scientific tastes, and studied medicine in Edinburgh University. He took a distinguished place there, and devoted himself especially to clinical work. He took his M.B., C.M., in 1868, with honours, and first went to Hay, where he built up a practice as large as he could possibly manage, and was universally esteemed as a man and as a physician. He did not rest contented with relying on former rules of practice, but made accurate observations for himself on many subjects, especially in regard to the treatment of rheumatism by the salicylates. He made extensive original investigations, which he embodied in his Graduation Thesis for M.D. in 1881, and afterwards published in the *Practitioner*; they show a markedly scientific spirit, and close clinical observation. He removed to Gunnersbury, London, a few years ago, and was soon engaged in extensive practice. He was a man of sound judgment, and of high professional honour, as well as marked general ability and culture. He had an attack of pneumonia in November last, and this was succeeded by a series of obscure hepatic, renal, and purpuric symptoms. He went to the Orkneys in June to see if his native air would restore his health, but he gradually became worse, and died in the manse where he was born, calm, cheerful, and resigned to the will of the Almighty, as a man who had done his work well, only mourning for those he left behind.

Dr. Clouston married Emma, eldest daughter of William Traill, M.D., of Woodwick, Orkney, by whom he leaves five young children. On his father's side he came of a Norse stock, and through his two grandmothers he was connected with the Traills of Holland and the Stewarts of Brugh, two of the oldest Orkney families of Scotch importation.

DR. BENJAMIN HUNT.

IT is with much regret we announce the death on the 3rd inst. of Dr. Benjamin Hunt, at his residence, George-road, Edgbaston, Birmingham. Dr. Hunt was born at Whitchurch, Hereford, on Aug. 19th, 1827, his father, the Rev. Thos. Maxwell Hunt, being rector there at that time. Dr. Hunt pursued his medical studies at University College and Hospital, where he filled the office of house-surgeon under Mr. Richard Quain. He was appointed house-surgeon to the Queen's Hospital, Birmingham, in 1854, and always distinguished himself for conscientious, painstaking, and successful work. He then commenced general practice, which he only relinquished four years since on his appointment to the physicianship of the Queen's Hospital and obtaining qualification as a member of the Royal College of Physicians. A comparatively slight ailment having necessitated a surgical operation, Dr. Hunt could not be prevailed upon to take indispensable rest. Symptoms of local and constitutional irritation set in, and pyæmia was the fatal sequel. By his private and public patients alike Dr. Hunt was beloved; he was a very great favourite with hospital residents and students, and amongst his professional brethren he has left a lasting reputation for unblemished honour and unfailing kindness.

HENRY FINCH, M.D. ST. AND.

WE regret to record the death of the above gentleman at the early age of forty-four, which occurred on Sept. 19th at Colchester. A native of Cambridge, after passing his medical examinations at Cambridge and University College Hospitals, where he gained many honourable distinctions, among others the gold medal for anatomy and physiology, and after having been house-surgeon at various other hospitals, he made two long voyages in emigration service and under the Peruvian Government. On his return he settled for a short time at Newbury, whence he removed to Colchester, where he was in practice for upwards of twelve years, and where his integrity, upright conduct, genuine good-heartedness, and gentlemanly and prepossessing manners gained him many firm friends and the respect of all. His death was accelerated, it is believed, by worry in establishing a new and large practice, into which he was just about to enter when death cut him off. A man of great ability, much shrewdness and penetration, always keeping well up in the ever-advancing knowledge of his profession, his early death will be a real loss. He leaves a wife and young children.

F. H. WILSON ILES, M.D., M.R.C.S., L.S.A.

THE death of Dr. Iles of Watford, which took place on the 19th inst., was caused by blood-poisoning contracted on the 21st ult. during the performance of tracheotomy. The deceased was born in Lincolnshire in 1834. He studied medicine at St. George's Hospital, Dublin, and Paris, taking the M.R.C.S. and the L.S.A. in 1855, and the M.D. St. Andrews in 1862. During the cholera epidemic of 1855 Dr. Iles filled the post of resident medical officer to the Western General Dispensary, London, when a district was assigned to him. In 1859 he commenced practice in Watford, in partnership with Dr. S. Pidcock. Dr. Iles was surgeon to the West Herts Infirmary, and honorary assistant-surgeon to the 2nd Herts Volunteers, and was connected with almost every scheme that has been designed during the past twenty years for the benefit of the town in which he resided.

THE HIND FUND.

A MEETING of Mr. George Hind's friends and former pupils will be held, by the kind permission of the directors, in the Board-room of the Briton Life Offices, West Strand, on Thursday next, October 4th, at 5 P.M. The following subscriptions to the fund have been received :—

Dr. Jones	£21	0	T. Wakley, jun., Esq.	£2	2
F. E. Webb, Esq. ...	21	0	Dr. Stiven	2	2
Sir Erasmus Wilson...	10	10	Dr. Elliot	2	2
S. W. Rayner, Esq....	5	5	Dr. B. A. Duncan ...	2	2
Dr. Watson	5	0	G. B. Sweeting, Esq....	2	2
Dr. Luke	5	0	J. Tweedy, Esq. ...	2	2
Dr. Barton	5	0	Dr. Domett Stone ...	2	2
Thomas Wakley, Esq.	5	0	T. M. Stone, Esq. ...	1	1
Dr. Wakley	5	0	Mrs. Rawsetti... ...	1	1
George Lawson, Esq..	5	0	Dr. Richards	1	1
Harman Visger, Esq..	3	3	Dr. Collins	1	1
Miss Adela Bosanquet	3	3	T. Cooke, Esq. ...	1	1
Christoph. Heath, Esq.	3	3	Dr. J. B. Ryley ...	1	1
Berkeley Hill, Esq. ...	3	3	James T. Hyatt, Esq.	1	1
Dr. Horsefall... ...	3	3	Dr. W. A. Satchell ...	1	1
Sir Ed. Saunders ...	2	2			

The following contributions have been promised :—

Dr. R. Quain	£10	0	H. D. Shepard, Esq.	£3	3
Dr. C. J. Hall	10	0	C. J. Fuller, Esq. ...	2	2

John Tweedy, Esq., F.R.C.S., 24, Harley-street, will act as Treasurer *pro tem.*; A. J. Pepper, Esq., F.R.C.S., 122, Gower-street, and T. Wakley, jun., Esq., L.R.C.P., 96, Redcliffe-gardens, will act as Secretaries *pro tem.* Subscriptions may be paid to the Secretaries, to Messrs. Coutts, Strand, or to THE LANCET Office.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Sept. 20th :—

Bateman, Frederick Augustus Newton, Pall Mall.
Habgood, William, Wimborne, Dorset.
James, James Prytherch, Eastlake-road, Loughborough.
Little, Andrew Johnston, Belfast.
Lockwood, Harry, Gudcliffe Vale Road, Sheffield.
Marsden, James Aspinall, Paulet-road, Camberwell.
Smith, Joseph Spilsbury, Free Town, Sierra Leone.

THE Board of Health of New York, in view of the great prevalence of typhoid fever in the city, has issued an official address, urging the public to use every precaution against the spread of the epidemic.

DWELLINGS IN DUBLIN.—At the North Union Board of Guardians, on Wednesday, a member moved to obtain the necessary forms for putting the Labourers Act into operation. Another guardian mentioned that at certain places three miles from the city he had found in several labourers' dwellings the floors swimming in sewage, being four inches below the level of the adjoining yards; but for want of twelve farmers to sign the necessary requisition the board could not put the Act into operation.

CITY ORTHOPÆDIC HOSPITAL.—A donation of £20 has been made to this hospital from the trustees of the estate of the late Rev. T. J. Robinson. The sum of £83 has also been received towards the extension fund for opening additional wards.

STATE OF THE THAMES.—It was resolved at a recent meeting of the Richmond Vestry to convene a conference of the local boards and riparian proprietors and ratepayers of Twickenham, Isleworth, and Richmond to consider the state of the Thames between Teddington Weir and Isleworth, and the best means of securing a sufficiency of water in the river at the lowest state of the ebb tide.

PRESENTATION.—Mr. F. Workman of Reading was, on the 12th inst., presented with a silver salver, a case of eye instruments, and an amputating case, subscribed for by members of the Reading Pathological Society. Dr. Wells, in making the presentation, expressed the regret felt by the members that the state of Dr. Workman's health compelled him to leave England for Australia, but they hoped that the more genial climate of his future residence would act as a restorative.

THE HOSPITAL SATURDAY FUND.—The amount paid in on account of this year's collections in behalf of this fund up to the 22nd inst. exceeded that banked at the corresponding date last year by £1100. The workshop collection shows not only a large advance in the sums contributed, but a considerable increase in the number of firms subscribing, many business establishments which never previously gave to the fund having now substantially augmented its income.

CONGRESS OF SURGICAL AND ORTHOPÆDIC INSTRUMENT MAKERS.—A congress of surgical and orthopædic instrument makers took place at Frankfort-on-the-Main on the 10th, 11th, and 12th inst., to form an association for the purpose of improving the conditions under which the trade is carried on. The Association consists already of 120 manufacturers from various parts of the world. The executive committee consists of Messrs. Leiter (Vienna), Windler (Berlin), Walter-Biondetti (Basle), Krohne (Krohne and Sesemann, London), Simsky (Königsberg), Wendschuch (Dresden), Laibach (Lüttig), and Fischer (Freiburg-in-Baden).

AT the last meeting of the Hackney Board of Guardians attention was called to the increased consumption of spirits in the infirmary. For the five weeks ending Sept. 1st in the present year the amount consumed was 25 gals. 1 qt. 1½ pt.; while for the like period of last year it was but 7 gals. 1 qt. ½ pt. Several members of the Board contended that the medical officer should be allowed to prescribe spirits without interference, and that he ought to order what he considered necessary for individual patients, regardless of how it might appear in the aggregate. The subject then dropped.

THE NORFOLK AND NORWICH HOSPITAL. — A meeting of the governors of this hospital was held on the 22nd inst. for the purpose of receiving a report from a committee appointed to arrange a bazaar recently held in connexion with the opening of the institution by their Royal Highnesses the Duke and Duchess of Connaught. The report of the committee stated that, after providing for all expenses, the bazaar had resulted in an addition to the building fund of £5779, which it was hoped would cover the entire cost of fitting and furnishing the hospital, as well as any amount which may be due upon the fabric itself.

THE MONSALL FEVER HOSPITAL.—At the monthly meeting of the Board of Management of the Manchester Royal Infirmary on the 24th inst., several letters which have passed between the committee of Monsall Hospital and the Withington Local Board with regard to the discharge of persons treated for scarlet fever in that hospital were read. In the letters from the Local Board it was alleged that such persons are discharged too soon, and it was stated that in one or two cases they had after coming out of hospital communicated scarlet fever to others. As a result of these statements the committee have decided to keep such patients in the hospital for a longer period after desquamation, and a communication to that effect has been forwarded to the Withington Local Board.

BEQUESTS.—The following sums have been recently bequeathed:—By the will of the Very Rev. Archibald Boyd, D.D., late of Exeter, £250 each to the Devon and Exeter Hospital, the Cheltenham General Hospital, and St. Mary's Hospital, Paddington; £200 each to the Exeter Dispensary and the Exeter Eye Infirmary. By the will of Miss Caroline Hutton, late of Eastgate, Lincoln, £500 to build a fever ward in connexion with the Lincoln County Hospital; an amount equal to the proceeds of the sale of certain property, as to £500 thereof for the Lincoln General Dispensary, and as to the remainder for the County Hospital; £300 to the Earlswood Idiot Asylum; and £200 to the Samaritan Free Hospital. By the will of the Rev. William Thomas Browning, late of Lichborough, Northamptonshire, £100 to the Horton Infirmary, Banbury.

A TABULAR VIEW OF THE DAYS AND HOURS OF THE INTRODUCTORY LECTURES

To be delivered at the different Medical Schools.

WE reproduce the synopsis of the days and hours of the Introductory Lectures in a somewhat fuller form than it presented in our issue of the 8th instant.

	Lecturers.	Days and Hours.
St. Bartholomew's Hospital	(No Lecture)	—
Charing-cross Hospital	(No Lecture)	—
St. George's Hospital	Mr. W. H. Bennett	Oct. 1st 4
Guy's Hospital	(No Lecture)	—
King's College	Dr. H. W. Acland	Oct. 2nd 4
London Hospital	Prof. Huxley	,, 9th 8
St. Mary's Hospital	Dr. H. Jones	,, 1st 3½
Middlesex Hospital	Mr. A. P. Gould	,, 1st 3
St. Thomas's Hospital	Mr. Le Gros Clark	,, 1st 3
University College	Prof. J. Tweedy	,, 1st 4
Westminster Hospital	Mr. Boyce Barrow	,, 1st 3
Queen's College, Birmingham	Mr. Bennett May	,, 1st
University College, Bristol	(No Lecture)	—
Leeds School of Medicine	Dr. Clifford Allbutt	Oct. 1st 4
University College, Liverpool	Mr. Herdman	Sept. 29th
Owens College (Victoria University)	Dr. Arthur Gamgee	Oct. 2nd
Newcastle-on-Tyne School of Medicine	Joseph Cowen, M.P.	,, 1st 2
Sheffield School of Medicine	Mr. Arthur Jackson	,, 1st 5
Anderson's College, Glasgow	Dr. A. Wallace	,, 30th
Western Medical School, Glasgow	Dr. Duncan	,, 30th 3
Glasgow Royal Infirmary and School of Medicine	Dr. J. Stirton	,, 30th 1
Edinburgh University	(No Lecture)	—
Glasgow University	Prof. Young	Oct. 30th
Aberdeen University	(No Lecture)	—
School of Medicine, Edinburgh	(No Lecture)	—

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ADKINS, GEORGE, L.R.C.P.L., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health to the Plympton St. Mary Union Rural Sanitary Authority.

BERINGER, JOHN J., F.C.S., has been appointed Public Analyst for the Borough of Bodmin.

BRADSHAW, JAMES DIXON, M.B., M.R.C.P.L., M.R.C.S., has been appointed Honorary Physician to the Western General Infirmary.

BURROWS, H. C., M.R.C.S., L.R.C.P.Ed., has been appointed Surgeon to the Claypole Workhouse, vice H. R. Smith, deceased.

COLTART, WILLIAM WILSON, L.R.C.P.L., M.R.C.S., has been re-appointed Medical Officer for the Headley District of the Epsom Union.

COX, WILLIAM ALFRED, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer for the Banstead District of the Epsom Union.

DIXON, H. J., L.R.C.S.I., L.A.H.Dub., has been appointed Assistant Medical Officer and Dispenser to the Infirmary and Workhouse, Greenwich Union.

FOTHERBY, H. A., M.R.C.S., L.S.A.Lond., has been appointed Assistant Medical Officer to St. George's Union Infirmary and Workhouse, Fulham-road, vice Thos. Baker, M.R.C.S., L.S.A.Lond., resigned.

HAYMAN, SYDNEY ARTHUR, L.R.C.P.L., M.R.C.S., has been appointed Medical Officer for the First District of the Abingdon Union.

JOHNSTON, ALEXANDER, M.D. St. And., M.R.C.S., has been appointed Honorary Consulting Physician to Wellington Hospital, New Zealand.

LINDSAY, JOHN, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Assistant-Physician to the Royal Hospital, Belfast, vice Workman, resigned.

MARSHALL, J. INGHAM FEARBY, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the York Rural Sanitary District.

MORISON, DONALD, M.B., C.M.Glas., has been appointed Medical Officer for the Fourth District of the Bridlington Union.

PAGE, F. J. M., B.Sc., F.C.S., has been elected Demonstrator of Practical Chemistry at the London Hospital Medical College.

PIKE, CHARLES J., M.B., B.S.Lond., M.R.C.S., L.S.A.Lond., has been appointed Honorary Consulting Surgeon to the Launceston General Hospital, Tasmania, and a Member of the Board of Management.

PROWSE, ARTHUR BANCKS, M.D.Lond., M.R.C.S., has been appointed Assistant-Physician to the Bristol Royal Infirmary.

SHORTRIDGE, THOMAS WOOD, L.R.C.P.Ed., L.R.C.S.Ed., has been reappointed Medical Officer of Health for the Honiton Urban Sanitary District.

Births, Marriages, and Deaths.

BIRTHS.

BERRY.—On the 24th inst., at 1, South-street, Keighley, Yorkshire, the wife of John B. Berry, M.D., of a daughter.

FRASER.—On the 18th inst., at Melville-street, Edinburgh, the wife of Dr. Thomas R. Fraser, F.R.S., of a son.

GUTHRIE.—On the 17th inst., at Ashley Lodge, Esher, Surrey, the wife of J. Guthrie, M.D., of a son.

SHARP.—On the 20th inst., at Kenmare House, Walsall, the wife of Gwinnett Sharp, Surgeon, of a son.

STROVER.—On the 23rd inst., at Mill-hill, N.W., the wife of Walter Strover, M.R.C.S., of a daughter.

THOMSON.—On the 22nd ult., at Simla, India, the wife of Murray Thomson, M.D., of a son.

MARRIAGES.

CARTER—NORTH.—On the 26th inst., at St. Martin's Church, Potter Newton, by the Rev. R. R. Kirby, Vicar of Chapel Allerton, assisted by the Rev. R. K. Snowdon, Vicar of Clifford, Francis Richard Carter, M.R.C.S., eldest son of Joseph Barton Carter, M.R.C.S., of Elm House, Chapel Allerton, to Mary Temperley, youngest daughter of the late William North, Esq., of North-grove, Potter Newton.

GILLESPIE—BURBIDGE.—On the 19th inst., at St. Nicholas Church, Sevenoaks, by the Rev. T. Carteis, M.A., Vicar, William Henry Gillespie, L.R.C.S.I., L.K.Q.C.P.I., of Castle Cary, Somerset, son of the late James Gillespie, of The Hermitage, Clones, Ireland, to Sarah, only surviving daughter of the late James Ive Burbidge, of Clyde House, Norbiton, Surrey.

JAMES—HOLDEN.—On the 18th inst., at Holy Trinity Church, Huddersfield, David James, M.D. Univ. Ed., of St. Mary's, Ashton-upon-Mersey, Cheshire, to Jane, second daughter of the late John Holden, of Royton, Lancashire.

SCHOFIELD—TRAIES.—On the 18th inst., at St. Luke's, Countess Weir, Exeter, Frank Schofield, M.D., Medical Superintendent of Camberwell House, S.E., to Anne, second daughter of the late W. H. D. Traies.

WINGROVE—PUNSHON.—On the 11th inst., at St. Thomas's, Coventry, V. H. Wyatt Wingrove, L.S.A.Lond., of Torrington-square, London, to Minnie, only child of George Punshon, of Coventry.

DEATHS.

BALDING.—On the 25th inst., at his residence, Barkway, Herts, James Balding, M.R.C.S. & L.S.A.Lond., aged 86.

FINCH.—On the 19th inst., at Colchester, Henry Finch, M.D., after a short illness.

HEWAN.—On the 20th inst., at his residence, 9, Chester-square, Archibald Hewan, M.D., aged 51. Friends will please accept this intimation.

HODGE.—On the 20th inst., at Sidmouth, Benjamin Terry Hodge M.R.C.S., L.R.C.P.Lond., L.S.A.Lond., aged 65.

HOLMAN.—On the 19th inst., at Gipsy-hill, of pneumonia, J. R. Holman, M.D., Royal Navy, Deputy Inspector-General of Hospitals and Fleets (retired), aged 59.

LEARMONTH.—On the 21st inst., at the North-West London Hospital, of typhoid, Eleanor, the beloved daughter of Olivia and the late William Learmonth.

YARDE.—On the 19th inst., at Fairlea, Beechin Cliff, Bath, William Yarde, M.D., late Staff Surgeon of H.M. Navy, aged 47.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8 30 a.m. by Stewart's Instruments.)

THE LANCET OFFICE, Sept 27th, 1883

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 a.m.
Sept. 21	29 72	S W.	56	55	..	62	54	·02	Foggy
,, 22	29 68	E.	56	54	80	61	53	·17	Overcast
,, 23	30 00	W.	61	59	93	67	47	..	Fine
,, 24	29 73	S.W.	57	56	85	68	56	·17	Raining
,, 25	29 82	W.	61	58	106	71	57	·02	Cloudy
,, 26	29 68	S.W.	63	62	108	70	56	·00	Raining
,, 27	29·70	W.	59	54	101	65	53	..	Fine

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

FELLOWSHIP OF THE COLLEGE OF SURGEONS.

THE forthcoming Calendar of the Royal College of Surgeons shows the number of the Fellows at the present time to be 1166, including 593 who have obtained the distinction after undergoing examinations. There appear five gentlemen upon whom the Fellowship has been conferred as members of twenty years' standing under Section V. of the Charter of 15th Victoria—viz., Mr. E. R. Bickersteth, Liverpool; Sir Joseph Fayrer, Wimpole-street; Messrs. T. H. Huxley, Marlborough-place, N.W.; Oliver Pemberton, Birmingham; and John Tomes, Caterham. Of *ad eundem* Fellows there are only three—viz., Mr. A. E. J. Barker, Harley-street, and Sir William Mac Cormac, Harley-street, Fellows of the Irish College; and Mr. R. King, Hull, of the Edinburgh College of Surgeons. The senior Fellow of the College appears to be the venerable Mr. J. M. Arnott, who, seeing he was admitted a member of the College so long ago as April 4th, 1817, when it was necessary to be twenty-two years of age, must now be in his eighty-ninth year.

PUBERTY IN NEGRESSES.

To the Editor of THE LANCET.

SIR,—It seems a very common opinion, generally admitted all over Europe, that puberty occurs earlier in hot climates than in those lying within the temperate zone. Müller says some are of opinion that in the hot regions of Africa the changes of puberty take place in the female sex as early as the eighth year, and during the ninth year in Persia. It is also stated that young Jewesses menstruate earlier than other females in England. I am of opinion, however, with Mr. Roberton, of Manchester, who some time ago essayed to controvert this belief, that it is no other than a vulgar error. To enable me to obtain the necessary information with respect to negresses, and my interest is great, as I am from the tropics myself, I have strained every nerve to "hunt up" the necessary statistics, which I now append. These statistics I have obtained from a register of births, the registry being important in fixing the date of the first appearance of the catamenia. The undermentioned will, I consider, confirm the belief that menstruation does not commence earlier in negresses than in female Europeans. (*Vide* Dr. Copland's Dictionary of Practical Medicine, article Age, and also Dr. Good's Practice of Medicine, article Puberty.) Out of twenty-one cases, menstruation appeared in one aged sixteen, in three at fifteen, in three at fourteen, in three at thirteen, and in two at twelve; whereas it had not appeared in one aged fourteen, in two aged thirteen, in one aged twelve, in one aged eleven, in another aged ten, one aged nine, and in two aged eight. It is further stated that many cases of negresses from eight to eleven years of age might be instanced who have not yet had any menstrual secretion. I am, Sir, yours obediently,

Woburn-place, Russell-square, W.C., Sept. 19th, 1883 — C. S. TAYLOR.

VIVISECTION FOR FOOD PURPOSES.

WE sometimes hear the ruthless foes of scientific research by experiment on living animals denounce the medical profession as unequalled in the cruelty of its instincts. What shall we say of the following "instructions for caponing chickens"? This choice specimen of the art of causing pain needlessly and with no compensatory purpose is, we are assured, issued by a respectable house of business for the information of its customers. The origin of the "instructions" is said to be American. Further comment is unnecessary.

"Instructions for Caponing Chickens.—The chicken should be about three months old, and kept without food for about thirty-six hours before the operation, which is best performed on an ordinary table, in a good light. Place the fowl on the table on its left side, and tie one end of a string about three feet long to the wings, to secure them, having previously attached a weight to the other end of this string, which must be dropped over the end of the table, so that it will remain suspended; then take the legs of the fowl and attach another string and weight in the same manner, in order that the wings and legs may be secured for the operation, which is performed thus:—Pick the feathers from the hip bone over the last rib; take a sponge and wet the ribs and feathers around, so that they will be out of the way during the operation. Insert the knife about half an inch between the first and second ribs from the hip bone, and cut downwards and forwards to the end of the ribs; then turn the knife and cut up near the backbone. Now put in the spreaders and regulate the tension by the india-rubber band to suit the size of the fowl. Open the ribs and cut through the middle membrane that covers the bowels. Take the forceps and grip the upper testicle, and turn the forceps over once, thereby separating the testicle from all its attachments except the spermatic cord; now pull the testicle out. Repeat the operation on the lower testicle. Be careful to remove the whole of the testicles. Also carefully avoid the large vein under the testicles, or the operation might terminate fatally. Now untie and let the bird go. The incision must not be sewn up. The fowl should not be allowed to roost for a few days. If carefully performed, the loss by the operation does not exceed 3 per cent. The practical result of this operation is to largely increase the weight of the fowl."

THE MEDICAL BILL.

To the Editor of THE LANCET.

SIR,—Will you permit me to offer a few words in reply to your correspondent, "Aristobolus," who writes in last week's LANCET, evidently more to air a personal grievance than anything else. "Aristobolus," in common with many others, takes a most melancholy and with all respect, I should say, an exaggerated view of the standing of a singly qualified practitioner. It is quite well known that union medical appointments must be held by doubly qualified men, but a union appointment, or anything akin to it, is by no means the aim of the bulk of men in practice, nor is the holder of such appointment acknowledged to occupy any higher status than his brother practitioner, who may prefer to do without such. Here I would point out to "Aristobolus" that parochial appointments in Scotland are not so restricted, and a large number of these are held by licentiates of the much maligned Scottish corporations. Again, after all the talk about the one-portal system, how can "Aristobolus," or any of our English brethren, explain the justice of classifying bodies, the diplomas of which represent a complete examination in all the subjects of the medical curriculum, with others whose diplomas hardly represent a decent half? We do not require to particularise in order to identify. Suffice it to say, the Scottish corporations are free of this glaring defect. If "Aristobolus" will make inquiry, he will find that circumstances, similar to those to which he alludes, have occurred long ere now at the Glasgow Faculty. Many an M.D. has been referred to a rehearsal of the practical details of his profession. To use the words of a rising Glasgow teacher, "A practical and clinical examination at the Faculty is not a thing of yesterday." I am, Sir, yours obediently,

September 18th, 1883. — A GLASGOW SURGEON.

*** What does our correspondent think of the justice of a system which allows a corporation, after examining a man in all subjects, to give him a diploma only for one third or a half; thus driving him to another body for diplomatisation in the other half or two thirds of his profession? We have heard many pretentious arguments for the perpetuation of the Faculty. The last one—that of our correspondent—that it is good for arresting and humbling young and vain M.D.'s is an interesting addition to them.—ED. L.

"A SUBJECT FOR EXPERIMEN."

To the Editor of THE LANCET.

SIR,—In reference to the offer of Mr. Doremus in your last issue, I beg to offer myself as one of the committee on the Food Reform side of the question. Having now lived for eighteen months on a non-flesh diet and with only a small amount of animal products, I shall be able to see fair play on his part. I have written him, and he is willing I shall be one of the committee on his side. If others will take up the challenge, I shall be very pleased to hear from them, and arrange how he can be tested in the interests of science and of diet.

I am, Sir, yours truly,

Oxford-street, W., Sept. 25th, 1883. — T. R. ALLINSON, L.R.C.P.

BEQUESTS.—The following sums have been recently bequeathed:—By the will of the Very Rev. Archibald Boyd, D.D., late of Exeter, £250 each to the Devon and Exeter Hospital, the Cheltenham General Hospital, and St. Mary's Hospital, Paddington; £200 each to the Exeter Dispensary and the Exeter Eye Infirmary. By the will of Miss Caroline Hutton, late of Eastgate, Lincoln, £500 to build a fever ward in connexion with the Lincoln County Hospital; an amount equal to the proceeds of the sale of certain property, as to £500 thereof for the Lincoln General Dispensary, and as to the remainder for the County Hospital; £300 to the Earlswood Idiot Asylum; and £200 to the Samaritan Free Hospital. By the will of the Rev. William Thomas Browning, late of Lichborough, Northamptonshire, £100 to the Horton Infirmary, Banbury.

A TABULAR VIEW OF THE DAYS AND HOURS OF THE INTRODUCTORY LECTURES

To be delivered at the different Medical Schools.

WE reproduce the synopsis of the days and hours of the Introductory Lectures in a somewhat fuller form than it presented in our issue of the 8th instant.

	Lecturers.	Days and Hours.	
St. Bartholomew's Hospital	(No Lecture)		—
Charing-cross Hospital	(No Lecture)		—
St. George's Hospital	Mr. W. H. Bennett	Oct. 1st	4
Guy's Hospital	(No Lecture)		—
King's College	Dr. H. W. Acland	Oct. 2nd	4
London Hospital	Prof. Huxley	,, 9th	8
St. Mary's Hospital	Dr. H. Jones	,, 1st	3½
Middlesex Hospital	Mr. A. P. Gould	,, 1st	3
St. Thomas's Hospital	Mr. Le Gros Clark	,, 1st	3
University College	Prof. J. Tweedy	,, 1st	4
Westminster Hospital	Mr. Boyce Barrow	,, 1st	3
Queen's College, Birmingham	Mr. Bennett May	,, 1st	
University College, Bristol	(No Lecture)		—
Leeds School of Medicine	Dr. Clifford Allbutt	Oct. 1st	4
University College, Liverpool	Mr. Herdman	Sept. 29th	
Owens College (Victoria University)	Dr. Arthur Gamgee	Oct. 2nd	
Newcastle-on-Tyne School of Medicine	Joseph Cowen, M.P.	,, 1st	2
Sheffield School of Medicine	Mr. Arthur Jackson	,, 1st	5
Anderson's College, Glasgow	Dr. A. Wallace	,, 30th	
Western Medical School, Glasgow	Dr. Duncan	,, 30th	3
Glasgow Royal Infirmary and School of Medicine	Dr. J. Stirton	,, 30th	1
Edinburgh University	(No Lecture)		—
Glasgow University	Prof. Young	Oct. 30th	
Aberdeen University	(No Lecture)		—
School of Medicine, Edinburgh	(No Lecture)		—

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ADKINS, GEORGE, L.R.C.P.L., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health to the Plympton St. Mary Union Rural Sanitary Authority.

BERINGER, JOHN J., F.C.S., has been appointed Public Analyst for the Borough of Bodmin.

BRADSHAW, JAMES DIXON, M.B., M.R.C.P.L., M.R.C.S., has been appointed Honorary Physician to the Western General Infirmary.

BURROWS, H. C., M.R.C.S., L.R.C.P.Ed., has been appointed Surgeon to the Claypole Workhouse, vice H. R. Smith, deceased.

COLTART, WILLIAM WILSON, L.R.C.P.L., M.R.C.S., has been re-appointed Medical Officer for the Headley District of the Epsom Union.

COX, WILLIAM ALFRED, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer for the Banstead District of the Epsom Union.

DIXON, H. J., L.R.C.S.I., L.A.H.Dub., has been appointed Assistant Medical Officer and Dispenser to the Infirmary and Workhouse, Greenwich Union.

FOTHERBY, H. A., M.R.C.S., L.S.A.Lond., has been appointed Assistant Medical Officer to St. George's Union Infirmary and Workhouse, Fulham-road, vice Thos. Baker, M.R.C.S., L.S.A.Lond., resigned.

HAYMAN, SYDNEY ARTHUR, L.R.C.P.L., M.R.C.S., has been appointed Medical Officer for the First District of the Abingdon Union.

JOHNSTON, ALEXANDER, M.D. St. And., M.R.C.S., has been appointed Honorary Consulting Physician to Wellington Hospital, New Zealand.

LINDSAY, JOHN, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Assistant-Physician to the Royal Hospital, Belfast, vice Workman, resigned.

MARSHALL, J. INGHAM FEARBY, M.R.C.S., L.S.A.Lond., has been re-appointed Medical Officer of Health for the York Rural Sanitary District.

MORISON, DONALD, M.B., C.M.Glas., has been appointed Medical Officer for the Fourth District of the Bridlington Union.

PAGE, F. J. M., B.Sc., F.C.S., has been elected Demonstrator of Practical Chemistry at the London Hospital Medical College.

PIKE, CHARLES J., M.B., B.S.Lond., M.R.C.S., L.S.A.Lond., has been appointed Honorary Consulting Surgeon to the Launceston General Hospital, Tasmania, and a Member of the Board of Management.

PROWSE, ARTHUR BANCKS, M.D.Lond., M.R.C.S., has been appointed Assistant-Physician to the Bristol Royal Infirmary.

SHORTRIDGE, THOMAS WOOD, L.R.C.P.Ed., L.R.C.S.Ed., has been re-appointed Medical Officer of Health for the Honiton Urban Sanitary District.

Births, Marriages, and Deaths.

BIRTHS.

BERRY.—On the 24th inst., at 1, South-street, Keighley, Yorkshire, the wife of John B. Berry, M.D., of a daughter.

FRASER.—On the 18th inst., at Melville-street, Edinburgh, the wife of Dr. Thomas R. Fraser, F.R.S., of a son.

GUTHRIE.—On the 17th inst., at Ashley Lodge, Esher, Surrey, the wife of J. Guthrie, M.D., of a son.

SHARP.—On the 20th inst., at Kenmare House, Walsall, the wife of Gwinnett Sharp, Surgeon, of a son.

STROVER.—On the 23rd inst., at Mill-hill, N.W., the wife of Walter Strover, M.R.C.S., of a daughter.

THOMSON.—On the 22nd ult., at Simla, India, the wife of Murray Thomson, M.D., of a son.

MARRIAGES.

CARTER—NORTH.—On the 26th inst., at St. Martin's Church, Potter Newton, by the Rev. R. R. Kirby, Vicar of Chapel Allerton, assisted by the Rev. R. K. Snowdon, Vicar of Clifford, Francis Richard Carter, M.R.C.S., eldest son of Joseph Barton Carter, M.R.C.S., of Elm House, Chapel Allerton, to Mary Temperley, youngest daughter of the late William North, Esq., of North-grove, Potter Newton.

GILLESPIE—BURBIDGE.—On the 19th inst., at St. Nicholas Church, Sevenoaks, by the Rev. T. Carteis, M.A., Vicar, William Henry Gillespie, L.R.C.S.I., L.K.Q.C.P.I., of Castle Cary, Somerset, son of the late James Gillespie, of The Hermitage, Clones, Ireland, to Sarah, only surviving daughter of the late James Ive Burbidge, of Clyde House, Norbiton, Surrey.

JAMES—HOLDEN.—On the 18th inst., at Holy Trinity Church, Huddersfield, David James, M.D. Univ. Ed., of St. Mary's, Ashton-upon-Mersey, Cheshire, to Jane, second daughter of the late John Holden, of Royton, Lancashire.

SCHOFIELD—TRAIES.—On the 18th inst., at St. Luke's, Countess Weir, Exeter, Frank Schofield, M.D., Medical Superintendent of Camberwell House, S.E., to Anne, second daughter of the late W. H. D. Traies.

WINGROVE—PUNSHON.—On the 11th inst., at St. Thomas's, Coventry, V. H. Wyatt Wingrove, L.S.A.Lond., of Torrington-square, London, to Minnie, only child of George Punshon, of Coventry.

DEATHS.

BALDING.—On the 25th inst., at his residence, Barkway, Herts, James Balding, M.R.C.S. & L.S.A.Lond., aged 86.

FINCH.—On the 19th inst., at Colchester, Henry Finch, M.D., after a short illness.

HEWAN.—On the 20th inst., at his residence, 9, Chester-square, Archibald Hewan, M.D., aged 51. Friends will please accept this intimation.

HODGE.—On the 20th inst., at Sidmouth, Benjamin Terry Hodge M.R.C.S., L.R.C.P.Lond., L.S.A.Lond., aged 65.

HOLMAN.—On the 19th inst., at Gipsy-hill, of pneumonia, J. R. Holman, M.D., Royal Navy, Deputy Inspector-General of Hospitals and Fleets (retired), aged 59.

LEARMONTH.—On the 21st inst., at the North-West London Hospital, of typhoid, Eleanor, the beloved daughter of Olivia and the late William Learmonth.

YARDE.—On the 19th inst., at Fairlea, Beechin Cliff, Bath, William Yarde, M.D., late Staff Surgeon of H.M. Navy, aged 47.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Sept 27th, 1883

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 a.m.
Sept. 21	29·72	S.W.	56	55	..	62	54	·02	Foggy
,, 22	29·68	E.	58	54	80	61	53	·17	Overcast
,, 23	30·00	W.	61	59	93	67	47	..	Fine
,, 24	29·73	S.W.	57	56	85	63	56	·17	Raining
,, 25	29·82	W.	61	58	106	71	57	·02	Cloudy
,, 26	29·68	S.W.	63	62	108	70	56	·09	Raining
,, 27	29·70	W.	59	54	101	65	53	..	Fine

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

FELLOWSHIP OF THE COLLEGE OF SURGEONS.

THE forthcoming Calendar of the Royal College of Surgeons shows the number of the Fellows at the present time to be 1166, including 593 who have obtained the distinction after undergoing examinations. There appear five gentlemen upon whom the Fellowship has been conferred as members of twenty years' standing under Section V. of the Charter of 15th Victoria—viz., Mr. E. R. Bickersteth, Liverpool; Sir Joseph Fayrer, Wimpole-street; Messrs. T. H. Huxley, Marlborough-place, N.W.; Oliver Pemberton, Birmingham; and John Tomes, Caterham. Of *ad eundem* Fellows there are only three—viz., Mr. A. E. J. Barker, Harley-street, and Sir William Mac Cormac, Harley-street, Fellows of the Irish College; and Mr. R. King, Hull, of the Edinburgh College of Surgeons. The senior Fellow of the College appears to be the venerable Mr. J. M. Arnott, who, seeing he was admitted a member of the College so long ago as April 4th, 1817, when it was necessary to be twenty-two years of age, must now be in his eighty-ninth year.

PUBERTY IN NEGRESSES.

To the Editor of THE LANCET.

SIR,—It seems a very common opinion, generally admitted all over Europe, that puberty occurs earlier in hot climates than in those lying within the temperate zone. Müller says some are of opinion that in the hot regions of Africa the changes of puberty take place in the female sex as early as the eighth year, and during the ninth year in Persia. It is also stated that young Jewesses menstruate earlier than other females in England. I am of opinion, however, with Mr. Roberton, of Manchester, who some time ago essayed to controvert this belief, that it is no other than a vulgar error. To enable me to obtain the necessary information with respect to negresses, and my interest is great, as I am from the tropics myself, I have strained every nerve to "hunt up" the necessary statistics, which I now append. These statistics I have obtained from a register of births, the registry being important in fixing the date of the first appearance of the catamenia. The undermentioned will, I consider, confirm the belief that menstruation does not commence earlier in negresses than in female Europeans. (*Vide* Dr. Copland's Dictionary of Practical Medicine, article Age, and also Dr. Good's Practice of Medicine, article Puberty.) Out of twenty-one cases, menstruation appeared in one aged sixteen, in three at fifteen, in three at fourteen, in three at thirteen, and in two at twelve; whereas it had not appeared in one aged fourteen, in two aged thirteen, in one aged twelve, in one aged eleven, in another aged ten, one aged nine, and in two aged eight. It is further stated that many cases of negresses from eight to eleven years of age might be instanced who have not yet had any menstrual secretion. I am, Sir, yours obediently,

Woburn-place, Russell-square, W.C., Sept. 19th, 1883 C. S. TAYLOR.

VIVISECTION FOR FOOD PURPOSES.

WE sometimes hear the ruthless foes of scientific research by experiment on living animals denounce the medical profession as unequalled in the cruelty of its instincts. What shall we say of the following "Instructions for caponing chickens"? This choice specimen of the art of causing pain needlessly and with no compensatory purpose is, we are assured, issued by a respectable house of business for the information of its customers. The origin of the "Instructions" is said to be American. Further comment is unnecessary.

"Instructions for Caponing Chickens.—The chicken should be about three months old, and kept without food for about thirty-six hours before the operation, which is best performed on an ordinary table, in a good light. Place the fowl on the table on its left side, and tie one end of a string about three feet long to the wings, to secure them, having previously attached a weight to the other end of this string, which must be dropped over the end of the table, so that it will remain suspended; then take the legs of the fowl and attach another string and weight in the same manner, in order that the wings and legs may be secured for the operation, which is performed thus:—Pick the feathers from the hip bone over the last rib; take a sponge and wet the ribs and feathers around, so that they will be out of the way during the operation. Insert the knife about half an inch between the first and second ribs from the hip bone, and cut downwards and forwards to the end of the ribs; then turn the knife and cut up near the backbone. Now put in the spreaders and regulate the tension by the india-rubber band to suit the size of the fowl. Open the ribs and cut through the middle membrane that covers the bowels. Take the forceps and grip the upper testicle, and turn the forceps over once, thereby separating the testicle from all its attachments except the spermatic cord; now pull the testicle out. Repeat the operation on the lower testicle. Be careful to remove the whole of the testicles. Also carefully avoid the large vein under the testicles, or the operation might terminate fatally. Now untie and let the bird go. The incision must not be sewn up. The fowl should not be allowed to roost for a few days. If carefully performed, the loss by the operation does not exceed 3 per cent. The practical result of this operation is to largely increase the weight of the fowl."

THE MEDICAL BILL.

To the Editor of THE LANCET.

SIR,—Will you permit me to offer a few words in reply to your correspondent, "Aristobulus," who writes in last week's LANCET, evidently more to air a personal grievance than anything else. "Aristobolus," in common with many others, takes a most melancholy and with all respect, I should say, an exaggerated view of the standing of a singly qualified practitioner. It is quite well known that union medical appointments must be held by doubly qualified men, but a union appointment, or anything akin to it, is by no means the aim of the bulk of men in practice, nor is the holder of such appointment acknowledged to occupy any higher status than his brother practitioner, who may prefer to do without such. Here I would point out to "Aristobulus" that parochial appointments in Scotland are not so restricted, and a large number of these are held by licentiates of the much maligned Scottish corporations. Again, after all the talk about the one-portal system, how can "Aristobolus," or any of our English brethren, explain the justice of classifying bodies, the diplomas of which represent a complete examination in all the subjects of the medical curriculum, with others whose diplomas hardly represent a decent half? We do not require to particularise in order to identify. Suffice it to say, the Scottish corporations are free of this glaring defect. If "Aristobolus" will make inquiry, he will find that circumstances, similar to those to which he alludes, have occurred long ere now at the Glasgow Faculty. Many an M.D. has been referred to a rehearsal of the practical details of his profession. To use the words of a rising Glasgow teacher, "A practical and clinical examination at the Faculty is not a thing of yesterday." I am, Sir, yours obediently,

September 18th, 1883. A GLASGOW SURGEON.

*** What does our correspondent think of the justice of a system which allows a corporation, after examining a man in all subjects, to give him a diploma only for one third or a half; thus driving him to another body for diplomatisation in the other half or two thirds of his profession? We have heard many pretentious arguments for the perpetuation of the Faculty. The last one—that of our correspondent—that it is good for arresting and humbling young and vain M.D.'s is an interesting addition to them.—ED. L.

"A SUBJECT FOR EXPERIMEN."

To the Editor of THE LANCET.

SIR,—In reference to the offer of Mr. Doremus in your last issue, I beg to offer myself as one of the committee on the Food Reform side of the question. Having now lived for eighteen months on a non-flesh diet and with only a small amount of animal products, I shall be able to see fair play on his part. I have written him, and he is willing I shall be one of the committee on his side. If others will take up the challenge, I shall be very pleased to hear from them, and arrange how he can be tested in the interests of science and of diet.

I am, Sir, yours truly,

Oxford-street, W., Sept. 25th, 1883. T. R. ALLINSON, L.R.C.P.

INJURIOUS EFFECTS OF LEAD PREPARATIONS IN OILCLOTH.

THE Council of Public Hygiene of the department of the Seine has been from time to time occupied with the question of the lead preparations sometimes used in the manufacture of oilcloths, &c., particularly with reference to the moleskin cloth used for lining children's carriages. According to the *Moniteur des Fils et Tissus*, the danger was considered to be of such a character that the members of the council requested the prefect of police to prohibit the use of such articles. According to analytical results, there is the liability of injury to health by particles of the oilcloth containing lead (used for covering tables, &c.) becoming detached and coming in contact with the skin. Should vinegar be allowed to remain a certain length of time on such a material, the salts of lead would form soluble acetates. In urging on the prefect the necessity of his action in the manner indicated, attention is drawn to the fact that these cloths can easily be made without such preparations.

Mr. James J. Putnam (Boston).—The report and remarks on the subject will be found in THE LANCET of July 11th, 1874.

CASE OF ANENCEPHALUS AT THE ROTUNDA.

To the Editor of THE LANCET.

SIR,—While acting as clinical assistant at the above hospital, I was called to a case of doubtful presentation in the extern maternity, which I diagnosed to be one of anencephalus fœtus. I beg to lay before your readers some important points in the diagnosis of such cases, with special reference to the case in hand.

Mrs. G——, aged thirty-eight; third pregnancy, full term; somewhat anæmic, and fairly well developed; previous health good; two former confinements tedious, the forceps being used; last confinement three years ago; both children living, healthy, and very well developed; husband tall and well formed. On external examination the abdominal walls were found to be extremely lax and œdematous; the membranes had been ruptured just before by the gentleman in attendance, as the distension was very great from hydramnos, and the first stage had been very prolonged; sixteen pints of liquor amnii were allowed gradually to escape. By palpation the back of the fœtus could be clearly made out on the right side, and the small parts to the left posteriorly; the cranial end of the fœtus could be grasped over the pubes, entering the pelvis. The fœtal heart was best heard to beat (at the rate of 120 per minute) in the right hypogastrium. The os uteri was found to be almost fully dilated, and what seemed a face presented in the second position. The nose was felt and the eyeballs markedly protruding; the fingers, passing forwards, dipped over a sharp orbital ridge into a depression corresponding to the calvaria, with a small fleshy protrusion in its centre (the exposed medulla), which, when pressed on, caused vigorous spasmodic movements of the fœtus. The mastoid processes were very prominent, and the distance between them small. The patient was exhausted, having been in the first stage fully twenty-three hours. A binder was put on, and the uterine efforts aided, but the shoulders seemed to be arrested at the brim. Dr. Henry, the senior assistant-physician, was sent for, and a drachm of liquid extract of ergot administered, immediately after which she was anæsthetised, the forceps applied, and a safe delivery effected. The fœtus was large, and, with the exception of spina bifida, was well developed from the shoulders to the lower extremities; the umbilical cord was shorter than usual, and constricted the middle of the left arm so tightly as to leave a marked groove one-third of an inch deep, and, strange to say, the distal portion of the limb was well developed, and to all appearance similar to its fellow. Another drachm of ergot was administered at the end of the second stage. There was slight hæmorrhage. The placenta was retained and adherent, having a very large uterine attachment, and was detached by the introduction of my left hand into the uterus after gradual dilatation of the os.—I am, Sir, yours, &c.,

Dublin, Sept. 11th, 1883. H. D. M'CULLOCH, M.B. & C.M. Glas.

NURSING AT ST. JOHN'S HOUSE.

To the Editor of THE LANCET.

SIR,—In reply to many inquiries, I beg you to permit me thus to announce to the professional friends of St. John's House the fact, which has already appeared in the usual advertisements, that there has been no cessation in the nursing work of this institution. Skilful medical and surgical nurses can be obtained on application to the Lady Superior personally or by letter. The hospital work at King's and Charing-cross is continued as heretofore.

I am, Sir, your obedient servant,

GEORGE WILLIAM BELL, Hon. Sec.

St. John's House, Norfolk-street, Strand, Sept. 24th, 1883.

TREATMENT OF PUERPERAL CONVULSIONS.

To the Editor of THE LANCET.

SIR,—I have recently had two cases of puerperal convulsions following delivery in which the following treatment was successful:—About twelve ounces of blood were taken from the arm, and a hypodermic injection of one-third of a grain of morphia administered. The seizures stopped immediately, and sleep was procured. A little chloral and bromide of potassium were given for a day or two subsequently.

I am, Sir, yours faithfully,

Sept. 17th, 1883. C. J.

MEASURES AGAINST SHORT-SIGHTEDNESS IN BAVARIAN SCHOOLS.

THE Bavarian Ministry of Education has been investigating the causes of the short-sightedness proved by statistics to be more or less prevalent in German schools. The use of writing paper or of books in which the regular arrangement of figures is effected by means of small squares ruled all over the page in red has been forbidden in Bavaria in consequence of the opinion expressed by the Government medical authorities who have been examining the matter in conjunction with the Ministry of Education. Measures will be taken for the partial gradual adoption of this regulation in cases where such a modification seems advisable. Attention has also been called to the injury which results from pupils being obliged to write too much with pencil in note-books, this being particularly referred to in connexion with the higher classes in girls' schools.

Parum Eruditus.—1. Dr. Heneage Gibbes' work.—2. Consult our advertising columns.

ON THE IMMEDIATE INDUCTION OF PREMATURE LABOUR.

To the Editor of THE LANCET.

SIR,—The following case appears to be of sufficient interest to warrant my putting it on record.

During the night of June 14th last I was called to Mrs. M——, a primipara, aged twenty-four years, of previously healthy habits, and of spare frame. She had for a little time previously exhibited puffiness of face, œdema of legs, &c., pointing to renal trouble; but she had not sought my advice for these troubles. On my arrival, at about 1.30 A.M., I found her comatose. She had the first fit apparently during sleep, as her mother, who was lying in an adjacent bed in a small room, was awakened by the noise she caused. I was informed that she had suffered more than one attack of convulsions. I examined her, and found not the least sign of labour. The os was thin; I could just introduce the tip of my finger; it was, I found, dilatable. I soon was enabled to introduce a second finger, and, by continued gentle efforts, as I found the parts dilate, I introduced a third finger. By dilating at intervals I succeeded in introducing the whole hand into the uterus. I found no difficulty in getting hold of both feet, having previously ruptured the membranes, and bringing them down into the vagina. The feet and trunk were delivered without much difficulty, but there were both delay and some difficulty in getting the head away. The child was stillborn, apparently at the full term. There was not the least perceptible laceration or injury to the os, cervix, or extruded parts. During the delivery I grasped occasionally the uterus firmly, but could not induce any contractions of that organ. As I was afraid from this absence of contraction that hæmorrhage might ensue, I prepared a full dose of ergot, which I gave after the completion of the labour. During the operation of turning the patient tossed about, but she was not sufficiently sensitive to pain to show other signs of suffering. The delivery was effected in about three-quarters of an hour. After this and the removal of the placenta, attending which there was a free flow of blood, she sat up in bed, spoke sensibly, drank the infusion of ergot, and afterwards a dose of castor oil, as the bowels were constipated. The uterus remained large, feeling like a distended bladder, and, in spite of ergot, &c., gave no signs of contracting. There was after the first flow no sign of excessive discharge of blood. I waited in an adjoining room, the patient lying quiet and composed, seemingly disposed to sleep. In the course of half an hour I was sorry to hear signs of convulsive action. A moderately severe attack came on, and, lasting a few minutes, I gave instructions for the exhibition of an enema of castor oil, and saw her again the next morning. I found the convulsions had continued in a mild form at intervals. She was then (about 9 A.M.) profoundly comatose, with dilated pupils and frequent, feeble pulse. I gave no hopes of improvement, and she died about noon. The interest of the case lies in this: it shows the possibility of immediately inducing labour at or near the full period in a primipara, and of completing this without any injury to the parts. Convulsions are, in my experience, more frequent in first labours. About a year ago I met with a similar case, only labour came on simultaneously, and I applied the forceps. The convulsions returned after delivery, but in this case the patient recovered.

I am, Sir, your obedient servant,

Australia, July, 1883. HARRY LEIGH ATKINSON, M.D. Melb. &c.

THE COST OF PRESCRIPTIONS.

To the Editor of THE LANCET.

SIR,—Allow me to point out to Professor Attfield that what the public, and the medical profession for them, require is to obtain their drugs at a reasonable price. A host of medical men continue dispensing because if they did not their clients would have to pay exorbitantly for their drugs. Lately a patient, who in the ordinary course paid me 5*s.* for my advice and what drugs I thought right, saw a consulting surgeon in town, and, for the prescribed medicine, which, including bottle, paper, sealing-wax, and ink, could not have cost 6*d.*, was charged by the pharmaceutical druggist 4*s.* 6*d.* When the druggist supplies drugs of his own prescribing the charge is infinitely less. Let the pharmaceutical druggist supply prescribed medicines at a fair commercial value, and the medical profession will be only too glad to get rid of their dispensing, which gives them little profit and, in many cases, like my own, is all direct loss. I am, Sir, yours faithfully,

Framlingham, Sept. 23rd, 1883. GEO. E. JEAFFRESON.

COCOANUT AS FOOD.

SOME extraordinary stories are told of the value of cocoanut as an efficient food. The following instance is given by the *Fiji Times*:—

"A vessel that once left San Francisco with 400 passengers for Sydney had, in consequence of running short of stores, to put in at Samsa, where a large quantity of cocoanuts were obtained. During the remainder of the passage very heavy weather was encountered, in which the vessel became waterlogged, and only reached Sydney after a perilous journey of eighty days, during which time all the provisions ran short, and men, women, and children were fed only upon cocoanuts, being at last reduced to one per diem for each adult. Notwithstanding the diet, not a life was lost, not a single case of sickness occurred, and all the passengers landed in a healthy and well-nourished condition."

P. S.—See Reports of the Geological Survey. More detailed information is always given most willingly at the Geological Survey Office, Jermyn-street, S.W.

SEWAGE DISPOSAL.

To the Editor of THE LANCET.

SIR,—Your annotation on the drainage of a mansion at the West-end and leading article on the Thames pollution must induce all thinking men to reflect seriously on the present unsatisfactory mode of sewage disposal, and ought to make them think our much-vaunted scientific progress a mere parody upon the first law of nature in not returning to the earth that which we abstract from it. I would ask how much longer we are to continue polluting our rivers with that which is of value for agricultural purposes? Probably so long as the necessary manufacture is considered unprofitable in a monetary point of view; but we must bear in mind the present mode of sewage disposal is costly without being efficient, and certainly causes much sanitary discomfort. If the same money were spent by acting in conformity with nature's laws and recognising chemical change, mankind would be benefited. Agriculturists are willing to pay a heavy price for Peruvian guano. Would they not also pay for an equivalent obtainable on the spot provided only the determination to supply it was once agreed upon? I am strongly of opinion a short retention on our premises of excreta would be in the main preferable, and much less dangerous than the system at present in vogue, with its train of pipe leakage, sewer gas accumulation, &c. But the truth is, two factors operate in opposition to change—prejudice and love of convenience; the former difficult of removal, the latter hugged by those who think there is nothing like water for sweeping away our excreta, no matter where, so that it is out of sight, possibly into our house basements, or, almost as bad, into our beautiful streams. I am far from supposing any system of collection and manufacture would be free from difficulty and expense; but surely the gain to health would show a favourable balance. I well remember when the great London scheme was completed predicting such a state of things as now exists; it could not be otherwise. Stagnation from such an enormous outflow could only be a question of time, and, from your remarks, only a short time, comparatively speaking, has been required to bring it under notice.

I am, Sir, yours obediently,

Sept. 17th, 1883. A PROVINCIAL MEDICAL OFFICER OF HEALTH.

X. Y. Z.—Physician and Surgeon, or Mr. ——, M.R.C.P. Edin., and M.R.C.S. Eng.

FIRE-EXTINGUISHING APPLIANCES IN ASYLUMS FOR THE INSANE.

To the Editor of THE LANCET.

SIR,—Being acquainted with the fact that the great majority of public and private asylums are entirely destitute of appliances for the extinguishing of fires, permit me to offer the following suggestions:—

1. A pipe constantly charged with water at high pressure should run beneath the whole length of the floor of each corridor; at every fifty feet a stand-pipe to be provided, with at least seventy feet of hose ready for use at each corridor.

2. Where it is not possible to obtain water from the mains of a company, or where only insufficient pressure is to be obtained from such mains, a tower of sufficient elevation should be erected with a tank of large capacity on its summit always full of water, which could be raised from a well by steam power.

3. A proportionate number of the attendants should be once a week exercised in the use of the apparatus, one of these attendants to be on watch every night.

4. An official should be attached to the London Fire Brigade whose sole duty should be to inspect public and private lunatic asylums in England and Wales, to report as to their requirements in the matter of fire-extinguishing appliances, and also as to the efficiency of these appliances when provided. All committees and proprietors of asylums to have six months' notice to provide such precautions as may be deemed sufficient. Hereafter an annual inspection and testing to be made, and the inspector to give every twelve months a certificate as to the efficiency of the fire-extinguishing appliances. Upon discovery of any defect or inadequate precautions, the inspector to give one month's notice to remedy the same, in default of which the asylum to be closed.

It would appear highly advisable that some provisions similar to those which I have indicated be introduced in any future measure for a reform of the Lunacy Laws.—I am, Sir, your obedient servant,

Sept. 18th, 1883. AN ENGINEER.

A CURIOSITY IN OBSTETRICS.

MR. T. W. H. GARSTANG, of Dobcross, communicates the following:—"A patient, aged sixty-six years, was attended in her last confinement twenty-four years ago. She was very ill for eleven weeks afterwards; probably had puerperal fever. She has never had any menstrual discharge whatever since that time. She has entirely lost the sense of smell, and almost entirely that of taste. She refers these losses to the illness mentioned. Her general health is now good, save for a little chronic bronchitis and commencing fatty degeneration of the heart."

THE CHOICE OF A PROFESSION.

To the Editor of THE LANCET.

SIR,—The public mind has recently been so much exercised with the question "What to do with our boys," that it may not be amiss at this season, when so many parents have for the time settled this vexed question by entering their sons for the medical profession, to consider the wisdom of the step they have taken. It is to be feared several decide without due reference to the fitness of their choice; perhaps in some cases parental vanity is appeased by the proud desire of having a son a member of the learned profession and qualified to sign M.D. after his name. It is sad to reflect to what woeful disappointment such a parent exposes himself and his *infelix proles*. Too many by far of these young hopefuls are from the first absolutely disqualified to attain success, a larger number are qualified only for a very limited career of honour, and fewer still attain it. If parents would be guided by a reference to their medical advisers and the opinion of a sensible schoolmaster, much unavailing disappointment and regret would be averted. Youths of delicate physical organisation, or who betray in early training moral unfitness, such as love of idleness, impatience of control, self-will, or morbid hypersensitiveness, ought not to be entered for a race in which these are fatal disqualifications. Youths who are deficient in intellectual development, of vicious proclivities, or of low tastes may be considered too heavily handicapped to have a chance of success. And parents whose lives are a constant struggle to keep the wolf from the door, and who are actually without the means of launching their sons respectably in the practice of the profession, would do well to pause, for many reasons, before committing them to a life of penury and distress. Far better to seek in some other, though lower, walk of life, a path that may ultimately lead to competency and position. Nor does it always follow because one man has succeeded in the practice of medicine that his son will do as well as himself. I have known more than one instance to the contrary; and it is a significant fact that some of the leaders of the profession do not bring up their sons to follow it. In the life of Sir Thomas Browne I read that his son became a respectable practitioner; but his son again, though brought up to his father's calling, "gave himself up to drinking so much that he died by a fall off his horse going from Gravesend to his house in Southfleet, in Kent, being drunk, and sate up all night." And thus the male line of that illustrious name became extinct.

I am, Sir, yours obediently,

Sept. 24th, 1883. IGNOTUS.

Mr. E. Prideaux.—The paper is marked for early insertion.

Senex M.D. has not enclosed his card.

"ABNORMAL EAR SYMPTOMS."

To the Editor of THE LANCET.

SIR,—From Dr. Larsen's meagre account of his patient's symptoms, I should incline to the diagnosis of partial obstruction of both Eustachian tubes. The history of the trouble immediately following ear-ache, and the patient being the subject of syphilis, suggest throat mischief spreading through the tubes to the middle ear, the result being some obstruction from thickening of the mucous membrane, or, perhaps, even small warty growths around the orifices of the Eustachian tubes. It is not unusual for patients with partial tubal obstruction to be able to improve their hearing by altering the position of the head. Probably insufflation of the tympanum, by means of the Politzer bag, and irrigation of the naso-pharynx with a solution of ten grains of bicarbonate of soda to the ounce of water, will prove beneficial.

I am, Sir, yours faithfully,

Stamford-hill, N., Sept. 24th, 1883. W. T. WYATT.

Mr. C. Richardet.—We do not name particular physicians or surgeons.

C. R.—Apply to Mr. Upcott Gill, Publisher, 170, Strand, W.C.

TREATMENT OF CHOLERA.

To the Editor of THE LANCET.

SIR,—In reply to the question asked by "C. J." in your issue of August 4th, I write to say that on June 29th last at this place I injected half a drachm of ether, not hypodermically, but into the vein at the bend of the elbow, in a little Mussulman girl aged eleven, who was in the collapsed stage of cholera. It seemed to have a temporary effect in partially reviving her, the pulse becoming more perceptible, and the little patient saying, in answer to a question, that she felt warmer. But the effect passed away, and she died collapsed five hours afterwards, the parents refusing to allow a repetition of the experiment, although no alarming symptoms had resulted from it.

I am, Sir, your obedient servant,

Ahmednagar, India, August 24th, 1883. H. DE TATHAM, M.D., &c.

THE PARIS WATER SUPPLY.

IN an article in a recent number of the *Journal des Débats* the writer complains of the insufficient quantity of water allowed for domestic purposes, whilst no stint is shown in the amount expended on the streets and in the public services. The total supply of water per head per day to the Parisians appears to be 164 litres.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Professor Gamgee, Oaklands; Dr. Bristowe, London; Dr. M'Kendrick, Glasgow; Dr. G. de Courcy Morris, Liverpool; Messrs. Francis and Co., London; Mr. Oakley, London; Mr. Cowper, Colchester; Mr. Greig Smith, Clifton; Dr. Renshaw, Manchester; Dr. W. Sandford, Hereford; Mr. Engledue Prideaux, Wellington; Dr. Shuttleworth, Lancaster; Mr. E. F. Grün, Putney; Dr. Whelan, Haslar; Mr. G. W. Bell, London; Dr. Galabin, London; Dr. Mackenzie Booth, Aberdeen; Dr. John Ferguson, Toronto; Mr. Garstang, Doncross; Mr. Krohne, London; Messrs. Woollams and Co.; Dr. John Roche, Kingstown; Mr. G. E. Jeaffreson, Framlingham; Dr. Kavanagh, Lewisham; Dr. Mears, Newcastle-on-Tyne; Dr. Neale, London; Mr. W. T. Wyatt, London; Dr. W. G. Balfour, Bombay; Mr. Lawson Tait, Birmingham; Mr. Jackman, Coggeshall; Mr. Whitmore, Dursley; Mr. Harrison, Liverpool; Mr. Hume; Mr. Ruspini; Mr. Davies, Bath; Dr. Smith, Sedgefield; Mr. Lowe, Wandsworth; Dr. Adam, Malling; Mr. Sharp, Walsall; Mr. Wing, Warnes; Dr. Allen, London; Messrs. Hobson and Co., London; Dr. Owen, The Brook; Messrs. Irvine and Co., London; Messrs. Beal and Co., Brighton; Mr. Thompson, Folkestone; Dr. Ward Cousins, Southsea; Dr. J. Swallow; Mr. Roocroft, Wigan; Mr. Logan, Liverpool; Mr. Pike, Loughborough; Dr. Bell Taylor, Nottingham; Dr. H. V. Carter, Bombay; Mr. T. R. Allinson, London; Dr. Russell Reynolds, Neyland; Dr. Dickie, Shieldhill; Mr. Whitehead Reid, Canterbury; Mr. Walter Whitehead, Manchester; Dr. T. S. Clouston, Morningside; Dr. Beresford Ryley, London; Mr. Le Gros Clark, London; Dr. Edwin Payne, London; Dr. Dillon, Listowel; Major Morgan, London; Mr. Palmer, Newbury; Mr. Cooney, Albrighton; Mr. Vian; Dr. Armstrong, Newcastle-on-Tyne; Mr. Barratt, London; Messrs. Slinger and Son, York; Dr. Saul, Lancaster; Mr. Scott, Manchester; Mr. T. H. Bartleet, Birmingham; Miss Marryat, Brighton; Mr. Nixon, London; Mr. Spencer Watson; Dr. Syson; Dr. Chepmell, London; Dr. H. M. Fenwick, North Seaton; Dr. W. B. Kesteven, London; Dr. Hassall, San Remo; Senex M.D.; Ignotus; X. Y. Z.; Tabula Rasa; P. S.; India; A British Practitioner resident in the States; Konkan; Disgusted; Hydro; Delta; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Martin, Alcester; Mr. Norris, Epsom; Mr. Baker, Hereford; Messrs. Bebby and Co., Liverpool; Mr. Dorman, St. Leonards; Messrs. Danthorpe and Co., Exeter; Messrs. Milne, Edinburgh; Mr. Webb, Loxwood; Mr. Hardy, Bromsgrove; Mr. Hodgson, St. Helens; Mr. Stickland, South Kensington; Mr. M'Neill; Mr. Beckett, Ely; Mr. Hughes, Kingsland; Mr. Rayne, Newcastle-on-Tyne; Dr. Coombs, Peckham; Mr. Bullivant, Jersey; Mr. Coleman, Leicester; Mr. Armstrong, Biggar; Mr. Sweeting, King's Lynn; Dr. Fleming, Stockton-on-Tees; Mr. Seymour, Coventry; Mr. Dowman, Natal; Mr. Jones, Edinburgh; Mr. Lewes, Wingham; Mrs. Marten; Messrs. Maclachlan and Co., Edinburgh; Mr. Cook, Cheltenham; Mr. Hartland, Manchester; Messrs. Leader and Sons, Sheffield; Messrs. Nathan and Co., London; Mr. Watts, Frampton-on-Severn; Mr. Paxon, Newcastle; Mr. Fytes, Minchinhampton; Mr. Cursetjii, Bombay; Dr. Cooke, Great Maldon; Mr. Shaw, Chichester; Mr. Balding, Royston; Mr. Watts, London; Mr. Carter; Mr. Robinson, Southport; Mr. Butler, Teddington; Mr. Joseph, Trinidad; Mr. Larmonth, London; R. B., Birkenhead; Medicus, Leeds; Craydon; Assistant, Middlesboro'; C. L., Oldbury; Alpha, Workington; Medicus, South Bank; L. M.; J. U., Liverpool; Equus; M.D., London; M., Huddersfield; R. W.; Alpha, Epsom; Scaphoid; Companion; Epsilon; M.B., Leicester; Medicus; Trocar, Hulme; H. W. J.; M.B.; Mrs. C. B., Worthing; C. V. C.; J. T. J.; Dulwich; F.R.C.S., Birmingham; Delvo; Surgeon; Lector; G. H. P.; Catechu; Medicus, Leeds; &c., &c.

North Wales Guardian, Rautenstall Free Press, Dublin Evening Mail, Liverpool Courier, Bedfordshire Express, Le Phare d'Alexandrie, L'Echo d'Orient, Athenæum Daily News, Watford Observer, Morning Light, Western Daily Press, Brighton Guardian, &c., have been received.

Medical Diary for the ensuing Week.

Monday, Oct. 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

Tuesday, Oct. 2.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, Oct. 3.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Dr. Mansell-Moullin, Dr. W. A. Duncan, and others.—Dr. Swayne, "On Gangrene of the Thigh during the seventh month of Pregnancy."—Dr. Henry Bennet, "On the Anatomy, Physiology, and Pathology of the Os Uteri Internum."—Dr. E. S. Tait, "On Observations of Puerperal Temperatures."

Thursday, Oct. 4.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

Friday, Oct. 5.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

Saturday, Oct. 6.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.

SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year.....£1 13 6 | Six Months.....£0 16 8
TO CHINA AND INDIA..... One Year, 1 16 12
TO THE COLONIES AND UNITED STATES.. Ditto, 1 14 8

Post Office Orders should be addressed to JOHN CROFT, THE LANCET Office, 423, Strand, London, and made payable at the Post Office, Charing-cross.

Notices of Births, Marriages, and Deaths are charged five shillings.

Cheques to be crossed "London and Westminster Bank."

ADVERTISING.

Books and Publications	£0	5	0
Official and General Announcements	0	5	0
Trade and Miscellaneous Advertisements	0	4	6
Seven lines and under (each averaging ten words).			
Every additional Line	0	0	6
Front Page per Line	0	1	0
Quarter Page	1	10	0
Half a Page	2	15	0
An entire Page	5	5	0

The Publisher cannot hold himself responsible for the return of testimonials, &c., sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.
Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.
Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.
Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.
Advertisements are now received at all Messrs. W. H. Smith and Sons' Railway Bookstalls throughout the United Kingdom, and all other Advertising Agents.
Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.